University of Reading

Support and retention of school-based distance learners

First year experience of the Licensed Teachers Programme in Tanzania

A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy

Institute of Education

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Abstract

The recent expansion of secondary education in Tanzania, as a result of the Secondary Education Development Programme (2004-2009), has brought about some philosophical and practical issues surrounding teacher preparation and recruitment. One such issue has been on how best and cost-effectively teachers could be prepared and retained in schools, at the period of high teacher demand. This study addresses issues related to learning how to teach and retention in teacher education programmes organised using the distance learning mode. The study attempted to explain the relationship between factors related to student teachers' background, teacher education institutions, and schools on the one hand; and retention on the other; among student teachers of the Licensed Teachers Programme (LTP) in Tanzania. Special interest was paid to the role of schools in supporting school-based student teachers.

By using a mixed model approach to research, the study collected data from 221 respondents of a student questionnaire, followed four (4) case studies and maintained contact with 59 of the questionnaire respondents through short text messaging to explore student support and student persistence behaviour. Additional data were collected through interviews with LTP coordinators and through reviewing various programme documents. The data were then analysed in relation to student retention at the end of the first year of study.

The study has established a gap in perceptions on school-based teacher education (SBTE) between the Government and teacher education institutions (TEI). While the Government has demonstrated SBTE in its teacher education programmes, TEIs have persisted in using the *theory first, practice later* approach. The limitations of the teaching practice assessment model of teacher preparation could be addressed by developing mentoring and collegial relationships at school level, which appear to be more promising in both learning to teach and student retention. Similarly, distance learning (DL) appears to have many infrastructural challenges such that students are most likely to lack some basic materials and equipment necessary for DL. There is a need to address issues such as timely distribution of study materials, more effective communication systems with DL students, more effective face-to-face sessions, more supportive regional study centres, and investment on accessible DL technologies. These issues have constantly featured in the student survey, case studies and SMS and emails. Students' appreciation of the DL mode is still low, thus affecting retention.

The study has discovered various school-based support measures for distance learners, ranging from contextual and moral support, such as suitable school facilities and a welcoming school head and community; and teacher professional development such as teacher development meetings; to some

specific support for DL studies, such as book donations, peer tutoring and assisted travel to study centres. The study discovered that student teachers were most likely to drop out of the programme when they lacked contextual and moral support. Other forms of support had less effect on retention.

The study proposes a field-based model for teacher education that calls for a significant shift of policy and practice on teacher education. The new model requires a shift from the Teaching Practice model to school-based mentoring; as well as a greater investment in technology-based student support. Partnership between the central Government, teacher education institutions, local governments and schools is a key strategy in the new model. Partnership will particularly bridge the existing gap in practice between the Government and institutions of teacher education.

Declaration

I confirm that this is my own work and the use of all material from other sources has been properly and fully acknowledged.

Signed_____

Michael Wilfred Ng'umbi

November, 2009

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Chapter One: Introduction

In the beginning was the word and the word was distance education. And the word was written. And the written word was that of the teacher. And the written word of the teacher was that which had to be studied, understood and reflected back in assignments and examinations. The written word is still the paramount instrument of distance education but the teacher is no longer its only source or arbiter. Other voices are beginning to be heard (Rowntree, 1999, p.346).

1.1 *Overview of the chapter*

This study is about expansion of secondary education in Tanzania and the eventual issues that surrounded teacher preparation and recruitment, as a result of the Secondary Education Development Programme (SEDP) of 2004 - 2009. While focusing much attention on the role of schools, specifically the study attempts to explore student support in distance teacher education and its impact on retention. It aims at capturing perspectives from student teachers, school heads and the Licensed Teacher Programme (LTP) coordinators, on how schools influence student teachers' progress in their study. Other variables related to student background and training institution are also included so as to attempt to explain the relationship between support and student retention. A mixed model research approach was adopted employing a survey and case studies. In this chapter an introduction to the study is made in which information is organised in sections that contain the background to the licensed teachers programme, statement of the problem, rationale, research questions, scope of the study and organisation of the thesis.

1.2 *Background to the study*

Licensed teachers, as a group of teachers, are not a new category of teachers in the education system in Tanzania, although as from 2005 the concept has become the centre of education debates in the country. The category, as defined in the Education Act of 1978 (United Republic of Tanzania, 1978) comprises of untrained teachers and teachers from foreign professional backgrounds. Prior to 2005, attempts were made by the education authorities in Tanzania to deploy untrained teachers to work in secondary schools as a way of addressing teachers shortages in some subjects. It was reported that licensed teachers then were only few. In 1998, for example, their number in the public secondary schools was 120 (United Republic of Tanzania, 2001b).

The current eruption of teaching licenses to untrained teachers has a root in the Education Sector Development Programme (ESDP) which was developed in 1996 in order to address issues of access,

quality, equity, science and technology, and financing and management of education in the country (United Republic of Tanzania, 2001a). Two eventual programmes, the Primary Education Development Programme (PEDP) and the Secondary Education Development Programme (SEDP) translated the objectives at the primary and secondary level, respectively. Implementation of PEDP (2002-2006) saw a remarkable increase in pass rate at primary school level growing from 28.6% in 2001 to 40.1% in 2003 (United Republic of Tanzania, 2004d). More and more primary school leavers who had qualified to enter secondary school could not get the chance simply because there were no vacancies in the existing secondary schools.

The baseline fact was that Tanzania had been lagging behind in provision of secondary education. A commissioned study (Lewin, 2003a) established that the country was actually the last in the whole of Sub Saharan Africa in the primary–secondary education transition rate. The Lewin Report eventually recommended rapid expansion of the secondary school sub sector with more than 2,100 new classrooms being proposed by 2007. The recommendation was incorporated in SEDP. SEDP had set targets to increase enrolment at secondary level so as to increase the primary–secondary transition rate (United Republic of Tanzania, 2004d).

There was an obvious need for expansion of the secondary education sub-sector. As such SEDP resulted in mushrooming of secondary schools at community level. Every community was encouraged, and very enthusiastically responded, and built at least one secondary school to ensure transition of primary school leavers into secondary school. The education statistics show that Government secondary schools increased by 332% from 649 in 2003 to 2806 in 2007 while Non-Government schools increased by 57% over the same period (United Republic of Tanzania, 2007b). Even those communities previously viewed as education non-enthusiasts, this time they emerged with vigour and built schools. Singida Region for example, which statistically had been the poorest region in terms of primary seven pupil performance, had an increase of over 200 percent of secondary schools in three years (2005-2007). Shinyanga, another region poorly developed in terms of education infrastructure, interpreted SEDP as an opportunity to bridge the gap that existed between the region and other regions, by building community schools more than any region, in the same period. This move further exacerbated demand for teachers. As could be expected, the supply and demand of secondary school teachers was in its worst state Tanzania had ever seen.

A report on teacher demand and supply (Lewin, 2003b) revealed that teachers in secondary schools would be needed in large numbers particularly at a time when there was no reservoir of unemployed trained teachers in the labour market, coupled with an attrition rate of about 15%. Thus the report

recommended some rigorous measures in training and recruiting teachers. The measures included: on the job training of Form Six graduates as associate teachers to a Diploma level in two years; mixed mode work/study training e.g. six months in college and six at school, repeated for the period of two years; predominantly distance method training at local level using texts, assignments, and periodic short residential workshops; incentive programmes to attract back into teaching those who may have left for other employment; fee waivers for diploma courses; reduced length of degree level study and increasing the proportion of training e.g., two years at university and one year on the job.

Eventually, a list of strategies was worked out and implemented for the purpose of having the required number of teachers across specific subjects. The final SEDP paper (United Republic of Tanzania, 2004d) adopted three strategies for increasing the number of teachers. The first strategy was to increase enrolments in teacher training colleges for Diploma level teachers who were to spend one year in college instead of two in a mixed mode approach, the second year to be spent at school; establish an open and distance teacher education programme to upgrade diploma level teachers to degree level through distance learning courses offered by the Open University of Tanzania (OUT); and convert Dar es Salaam Teachers' College and Mkwawa High School into University Colleges of Education under the University of Dar es Salaam, in August 2005, in order to increase training of degree level teachers.

The second strategy was to recruit untrained teachers to be able to match up to the teacher demand. It was foreseen that the untrained teachers would be issued with teaching licenses and be assisted to study at a distance. The use of untrained teachers was further appreciated and strongly recommended by a report prepared for the World Bank on recruitment, retaining and retraining of secondary school teachers and principals in Sub-Saharan Africa (Mulkeen *et al.*, 2005) Referring to the untrained teachers as contract teachers, Mulkeen *et al* (2005) recommended Sub-Saharan African governments to employ and train the untrained teachers especially for those schools and regions with difficulties in retaining teachers across subjects' specialties. It is important to note that the World Bank was the major source of the SEDP finances (United Republic of Tanzania, 2004d). Eventually, with the mushrooming of community schools at community level, licensed teachers became a common category of teachers in public secondary schools. Between 2005 and 2007 a total of 12,976 untrained teachers had been recruited and deployed in public secondary schools (World Bank, 2008). Most of the untrained teachers were posted to the new rural community schools.

The new untrained teachers were exposed to the rudiments of teaching for a period of two weeks in 2005 as well as in 2006. The induction course duration was lengthened in 2007 into four weeks. The induction, it was hoped, would sooner or later be followed by a longer university–run training. Based on

the recommendations by the Lewin Report on teacher recruitment, the high school leavers employed as teachers would work in schools for two years before joining a teacher education institution. By so doing the graduating teachers from colleges and universities would take up the places as the untrained teachers were leaving for training.

Another recommendation, which is relevant to the current study, was that of providing the untrained teachers with a distance learning course on education to ensure that the teachers continued working as they studied. Based on a Memorandum of Understanding between the Ministry of Education and Vocational Training and the Open University of Tanzania (MoEC/OUT, 2005), the Open University was asked to design a distance learning programme for the licensed teachers in such a way that student teachers would be able to complete the programmes in three years. Out of the untrained teachers employed in the first batch of 2007, only 1500 were selected to join the Open University of Tanzania to pursue different degree programmes in a programme popularly known as the *Licensed Teachers Programme.* The Ministry was responsible for paying tuition fees plus costs for the periodic face to face meetings, by allowing its zonal teachers' colleges to be used as venues for the meetings for the LTP students, and food and accommodation for the students.

The deployment of untrained teachers in secondary schools met disapproval from the public. MoEVT had to quickly demonstrate that the teachers were going to be trained while working in their respective schools, within the shortest period possible. DL was the most appropriate mode for the programme. The choice of DL was desirable and inevitable in the sense that the teachers could undergo studies while continuing with teaching and hence not affecting the already unacceptable pupil–teacher ratios in schools by otherwise taking away the teachers to colleges. The latter position would indeed be impossible due to limited capabilities of the traditional college-based teacher education mode, among other factors (Dladla and Moon, 2002).

1.3 *Statement of the problem*

Literature on teacher education and teacher supply in Africa points to the need to change the way in which teacher education is currently approached. The literature argues that teacher demand cannot be met under the current college-based approach and hence some school-based, distance learning programmes and use of ICTs need to be adopted. Dladla and Moon (2002), for example, argue that "new forms of school-based, supported open learning will be the only logistically feasible and economically sound means of educating the millions of unqualified and underqualified teachers" (p.2). Two crucial issues feature in the cited literature: adoption of school-based teacher education and the use of ICTs to offer training and support.

The literature however depicts some areas of inconsistencies in the whole argument regarding the use of field-based teacher education - poor school infrastructure, rural-urban divide in most parts of Africa, and underdeveloped technologies are the most crucial (Unwin, 2004). This research was designed in order to study a teacher education programme for untrained secondary school teachers in Tanzania that sought to train 1500 teachers in three years using the distance learning mode. The Licensed Teachers' Programme (LTP), as was popularly known, was a collaborative effort between the Ministry of Education and Vocational Training and the Open University of Tanzania in which the Ministry was the sponsor. The study focused on four issues:

Firstly the study sought to explore policy and contextual realities within which LTP was implemented. Adoption of the DL mode is increasingly becoming an attractive policy option for many education systems because of its economic implications (Dladla and Moon, 2002) particularly as "an attempt to see if it is feasible for mass production of teachers" (Open University of Tanzania, 2008). However, much of the literature arguing the case for the suitability of DL for teacher education does not necessarily consider institutional beliefs, practices and contextual realities within teacher training institutions that would affect the implementation of such programmes. Will DL entail school-based teacher education or simply DL for students who happen to be studying education? What policy and infrastructural arrangements need to be put in place to ensure quality of the teacher education programme DL?

Secondly, the study sought to explore how LTP students learn how to teach and how they progress in the DL mode, given the fact that they are mostly school leavers with no experience in DL or teaching. Does the use of DL as a model for teacher education appeal to the learners as a mode of preference? Approaching the issue from the learner's perspective could provide a deeper understanding as far as student retention in DL programmes is concerned. This approach could also shed some light on student needs on DL.

Of particular interest, the study further followed DL student teachers' use of information and communication technologies as one important support mechanism. In DL, the use ICTs has in some institutions become the only way for providing academic and administrative support to learners. Literature in both DL and student retention identifies modern technologies as a huge opportunity that opens avenues for new forms of teaching and learning. Without incorporating technology DL becomes, in the words of Dladla and Moon (2002, p.4) a "much-discredited model"; an "old style distance education" and "the correspondence courses that provide a cheap means of training"; and, in the words

of Rowntree (n.d) “correspondence colleges of the nineteenth century” that relied on reading of print texts using the benefits offered by postal services.

There seems to be some limitations in arguing for the use of technology for teacher education, though. It has been reported that use of ICT for teacher education and particularly computer and the internet may not be the solution (Unwin, 2004). The “computer tragedy” as Unwin calls the problem, is brought about by a top-down approach where the computer and the internet are believed to be the solution but end up having “computer laboratories in educational institutions across Africa underutilized” (p.8). He concludes that blending print media, audio, visual and computer and the internet would be a wiser idea. Some literature has pointed to a new avenue for technology in Africa, mobile technology (Dladla and Moon, 2002).This study sought to explore the use of technology among distance learners with a view to making evidence-based recommendations regarding planning and designing student support tools based on technology.

Thirdly, much literature on teacher education is increasingly making recommendations for increased use of schools as partners in the field of teacher education, so as to ensure quality in teacher preparation. This study sought to explore how LTP student teachers used schools in learning how to teach. In Tanzania, the most common role played by schools in teacher education is 'teaching practice' (TP) (Mhando, 2006) whereby a teacher education institution enters an agreement with a school for the latter to allow student teachers from the former to practice classroom teaching for a couple of weeks in an academic year. However, the TP’s inadequacy is one of the most contested issues in the debate about the nature of teacher education (Down *et al.*, 1995) such that school-based teacher education has been proposed.

Increased emphasis on adopting school-based teacher education (SBTE) (compared to teaching practice) is highly influenced by the reflective practitioner movement which emphasises on practice, self-evaluation and reflection (Schon, 1987). The role of schools in teacher education is increasingly becoming vital, as Moon (1996, p.12) points out “the school as a site for training is unambiguously central to the task of establishing new and more challenging expectations”. In the context of developing countries, however, SBTE has been proposed as a matter of necessity where it is impossible to take millions of teachers away from their classes to attend a teacher training course in a traditional teacher education institution (Dladla and Moon, 2002). Together the two grounds highlight the need for more collaborative partnerships between teacher education institutions and the schools.

Partnerships take many forms. In England and Wales, for example, the emphasis on the school as partner is so strong that there has been a political decree on re-allocation of funding as well as responsibility from university to schools (Townsend, 1994). This is an extreme case though, and indeed some writers think that putting too much responsibility on schools risks reverting to a form of apprenticeship which could be a conservative and narrowing force (Solomon, 1987, Vick, 2006). As a counter to the danger of reducing teacher education into some conservative apprenticeship, much attention is being focused on activities such as peer interaction (Manouchehri, 2002, Puchner and Taylor, 2006); mentoring (Tellez, 1992, Harrison *et al.*, 2006, Hobson *et al.*, 2009, Tauer, 1998, Hawkey, 2006, Sundli, 2007); and use of cooperating teachers (Atputhasamy, 2005, Graham, 2006); but retaining some of the core functions such as student evaluation on the responsibility of the teacher education institution (Coolahan, 2002).

Using schools as partners in teacher education fits with teacher education by DL in that the student teacher spends more time at the school (Down, *et al*, 1995). However, spending time in school does not exclude the role of the teacher education institution since the student teacher continues to receive tutorials in the form of study materials, face-to-face tutorials and through the internet. Indeed for student teachers to spend more time in the school by itself does not make a programme school-based. Instead, SBTE encourages a form of reflective practice in the student teacher which draws from different forms of knowledge contributed by faculty. The faculty contribution is seen as that based upon 'research and theory-based knowledge and perspectives' with the contributions of school staff based upon 'situated knowledge of teaching and schooling and practical perspective' (McIntyre, 1997, p.5). While OUT is a DL institution little has been written as to how its teacher education programmes are school-based and not merely distance teacher education. This study sought to bridge this knowledge gap.

Lastly, retention of distance learners is another crucial issue in this study. Literature on student retention in DL reveals that distance learners are more likely to drop out of the programme than to stay (Perraton *et al*, 2002) and their retention is considerably lower, in some DL programmes as low as 20 to 30 percent, than that of conventional students (Flood, 2002). Studies further point out that most attrition occurs during the first year of study (Barefoot, 2000). At the same time, literature on beginning teachers suggests that teaching as a profession may have the lowest rate of retention compared to other professions (Ingersoll, 2001), with most of teachers who decide to quit from teaching do so in their first year of deployment. Two issues are apparent as far as this study is concerned. One is that exploration among first year student teachers could provide vital information on factors for dropouts and possible solutions to the problem; and two, by following first year DL student teachers of LTP the study could at

the same time explore factors related to the high attrition of beginning teachers during their first year of teaching.

By implication, when beginning teachers, who are likely to drop out of teaching during their first year of teaching, study through DL, which has a high rate of student attrition, the probability for dropout is even higher, and any attempt to study the factors associated with their attrition would require a complex model that should involve personal, institutional and workplace factors. Much of the literature of student retention in DL is influenced by theories of retention for non-traditional learners, particularly Bean and Meztner's (1985), as well as modern DL theories, particularly the use of technology as a means for distance learners' interaction (Dladla and Moon, 2002). The study adapted various 'complex' models of student retention in DL, as detailed in the conceptual model (1.4) below, so as to explore factors related to persistence and dropout among LTP student teachers.

1.4 *Conceptual model for studying student retention*

Although a univariate approach to studying student retention usually generates valuable information on specific variables that affect student retention, "it fails to identify the complex relationships that exist among many variables, and it does not identify which variables may be more important and which ones may not contribute uniquely to student attrition" (Summers, 2003, p.(n.p)). Hence, studying retention among school-based distance learners requires a complex model that would include other factors in addition to work environment. Literature (Bean and Metzner, 1985, Tinto, 1975, Kember, 1989, Kember, 1995) point to the need to deliberately study student retention using a complex model consisting of variables on student personal and background factors, university factors, and environmental factors. This study developed a model that addresses the student teacher, the university and the workplace, although the main focus was on the role of school, the workplace.

There are mixed ideas regarding the role of student background factors as determinants of student retention in DL. Some studies for example Shin & Kim (1999), assert that personal factors do not affect retention. Some others, for example Garland (1993a), would associate the whole retention phenomenon with personal factors as they view retention to be affected by some idiosyncratic factors. Some specific personal and background variables have been identified as being of significance on retention. They include life factors (Edge, 1982) in which it is asserted that retention is determined by student's private life circumstances outside the university; locus of control (Parker, 1999) in which it has been proposed that students with an internal locus of control, as measured by the Rotter's locus of control test, are more likely to persist in studies; learner autonomy theories of DL (Knowles, 1968, Moore, 1973, Wedemeyer, 1981) in which it has been reported that retention is determined by whether

the student is self-directed and autonomous in the learning process; and personal positive factors like a place in a perceived better higher education institution or a better job (Tresman, 2002, Coutts, 1994) in which case student persistence in a programme becomes no longer necessary on the side of the student.

The second set of variables is what is referred to as institutional factors and they are usually associated with the works of Kember, (1989; 1995); Sweet (1986) and Tinto (1975). It is argued that student retention follows a socialisation principle of integration. Students who have been effectively integrated into the university life, both socially and academically would eventually excel and persist in their studies. The assertions in this strand go beyond student integration into the university. For example, the issue of university culture (Fozdar *et al.*, 2006, Zepke *et al.*, 2005, Shin and Kim, 1999) in which it is argued that what retains students is the very way the university offers courses and the quality of the programmes, the way students are provided with support services, including online support services. Insistence on students fitting in to the university has however triggered some criticisms particularly when the theories are used in the context of distance learners or non-traditional learners who have little or no time at all to spend at the university campus.

Specifically in distance learning, issues of human contact by for instance contacting face-to-face meetings and having study centres (Fozdar *et al.*, 2006, Kember and Dekkers, 1987, Tait, 2000) could make a huge impact on student retention. It has further been argued that universities that provide an option for flexible learning could significantly increase student retention (Brown, 2005, Askar, 2005). By providing online learning and support more students could be attracted and retained (Askar, 2005). It has recently been suggested that the use of mobile learning and mobile support for distance learners (Fozdar and Kumar, 2007, Cook, 2006, Horstmanshof, 2004, Riordan and Traxler, 2005) could make a huge impact due to potential for having student interactions among themselves and between them and tutors. The use of mobile technology has been proposed even in contexts like Africa where computer technologies have been found to be failing (Unwin, 2005, Cook, 2006, Sanga *et al.*, 2008).

The third strand consists of school factors and specifically addresses variables that affect the decision to persist among student teachers studying and working in schools. As presented in Chapter Three, learning to teach involves subject and pedagogical knowledge, as well as practical knowledge, which is usually developed by practicing at school. Firstly, it has been pointed out that teaching as a job is associated with more attrition than probably any other profession (Ingersoll, 2001) and that many of teachers quitting do so in their first year. It has been revealed further that teachers in public schools in high poverty areas are more likely to drop out of teaching (Ingersoll and Smith, 2003, Ingersoll and

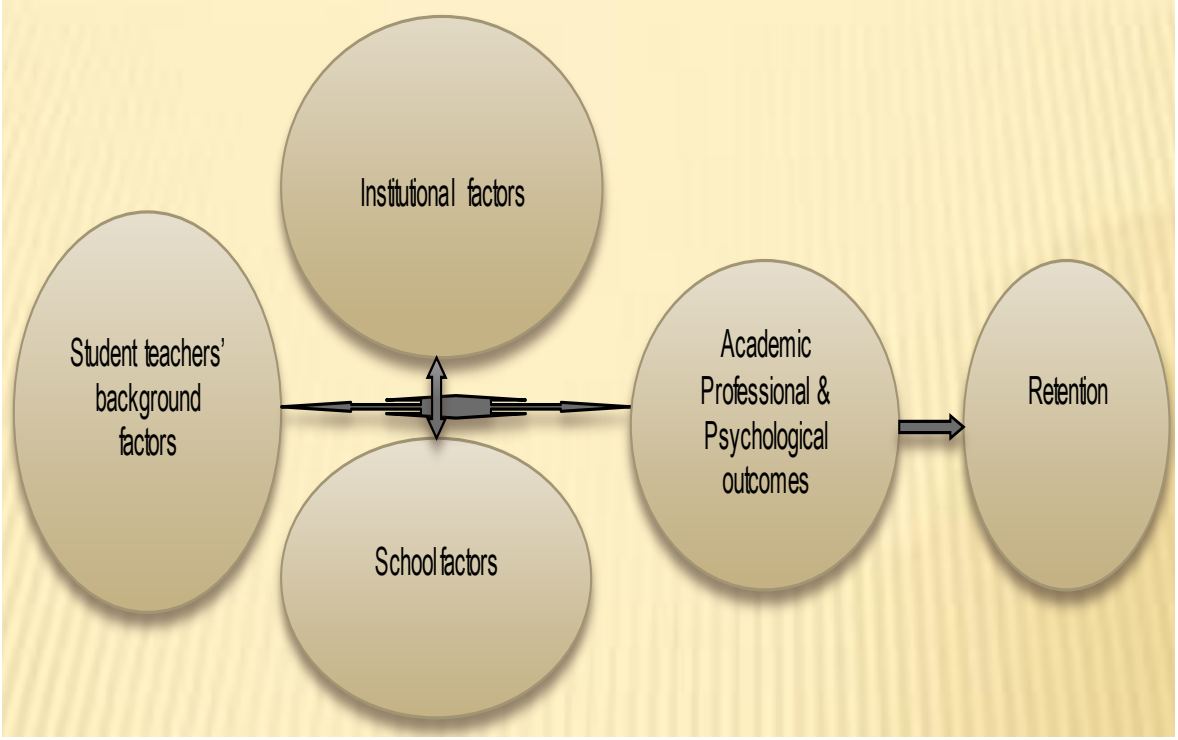
Smith, 2004). Secondly, it has been pointed out that unless tutors and cooperating tutors spend enough time with student teachers and provide detailed feedback and emphasize prompting student teachers to think critically, the TP model has too many limitations to be of use in learning how to teach (Atputhasamy, 2005; Christensen, 1988; Borko and Mayfield, 1995).

Instead of using the TP model, it has been argued in literature, mentoring should be adopted. Mentoring is most effective especially when mentors are selected for their knowledge and expertise, given training in mentoring and in adult learning, and when they have the ability to identify and communicate best practices (Ingersoll and Smith, 2004). School-based mentoring or face-to-face mentoring has the advantage of developing situated knowledge but could lack the 'bigger picture' of teaching (Brady and Schuck, 2005) implying a need for a more system-wide and/or online mentoring to bridge the gap. The distinction between TP and school mentoring is based on issues of power relations between the tutor and the student teacher (Roberts and Graham, 2008; Sundli, 2007; Tellez, 1992), collegiality (Abdallah, 2009), and developmental learning that accommodates trying out ideas and reflecting (Eraut, 1994).

The relationship between the three strands of factors in determining student retention is unclear. Some writers assert that the factors are related and together they influence retention (Thompson, 1997). However, there are some others who point to certain factors as being more responsible in explaining student retention. For example Bean & Metzner (1985) argued that environmental factors are more influential, particularly because they lead to psychological satisfaction or dissatisfaction. According to Bean and Metzner it is the psychological outcomes that could influence even a poor performer to persist. Their argument could be based on the fact that most dropouts decide to drop out voluntarily, not by being forced by factors like academic performance.

Although the focus of the study was school support, the conceptual model (Figure 1-1) considered that retention is a holistic issue and thus included background, institutional and school factors to attempt to explain variables related to student retention. The conceptual model assumes that interaction of background, institutional and school factors would lead to academic, professional and psychological outcomes, which in turn would lead to a decision to persist or drop out. However, this study was explorative in nature for which the model served as a guide to data collection and organisation; without preconceiving any specific variables within background, university and school factors

Figure 1—1 Conceptual model of retention for school-based distance learners



1.5 *Research questions*

The study was guided by the following four major questions.

1. What is the context in which the Licensed Teachers Programme was implemented?
2. How do learners learn in a distance learning mode?
   - i) What are students' attitudes to distance learning?
   - ii) What are students' perceived support needs?
   - iii) What is the actual support provided to distance learners?
   - iv) What is the role of ICTs in supporting distance learners?
3. How do student teachers learn how to teach?
   - i) What are students' attitudes to teaching?
   - ii) What are support strategies for learning how to teach?
   - iii) What is the observed performance of student teachers in the teaching practice?
4. What is the impact of support on student retention?

1.6 *Definition of concepts*

1.6.1 Distance learning

The concept of distance learning needs attention. In some instances it can be confusing because different terms such as correspondence education, home study, independent study, external studies, continuing education, distance teaching, self-instruction, adult education, technology-based or

mediated education, learner-centred education, open learning, open access, flexible learning and distributed learning distance education, external studies, teaching at a distance, off-campus study, and open and distance learning (Commonwealth of Learning, 2000) are used in literature to describe the concept of DL. Although there have been various definitions of DL within the field, the following six elements capture the essence of DL:

- the separation of teacher and learner;
- the influence of an educational organization;
- the use of media;
- the provision of two-way communication;
- the possibility of occasional meetings for both didactic and socialization purposes"; and
- the participation in an industrialized form of education (Keegan, 1988, p.30).

1.6.2 Retention

Literature on student progress at higher education level seems to have a lot of synonymous terms to express the process of student journey of study (Kember, 1995, Yorke 1997; McInnis et al 2000). The list of terms includes retention, progress, persistence, completion; or otherwise, attrition, withdrawal, drop-out, failure, and non-completion. Student retention is therefore a positive way of viewing the process of student persistence in the course of study. It also reflects the process through which a student develops from joining the programme to a decision to stay in the programme or to withdraw.

As used in literature on higher education, retention comes in multiple varieties. There are at least four basic types of retention (Hagedorn, 2005). Institutional retention, which is popular in various studies, is that referred when students remain in one institution from one year to another; system retention for which students who move from one institution to another are considered persisters because they are not lost from the system; retention in a discipline of study for which students moving institutions may still be persisters so long as they proceed within the same area of study (discipline); and retention in a particular course for which retention is measured by means of completion of a particular unit of study. Retention therefore is a construct and needs to be defined within the contexts it is being used. In this study, retention is viewed from the perspective of OUT, the teacher education institution, in order to focus attention on the possibility of retaining student teachers who are both working and studying. LTP retention therefore refers to the rate of student teachers who continued into a second year of study in the academic year 2008, and remained in their work stations. In this perspective, the retained student teachers were regarded as persisters regardless of their academic progress over the first year of the study; so long they were allowed to register for the second year.

1.6.3 Teacher education

Teacher preparation programmes, presented in numerous terminologies, have one common aim; "to ensure that teachers have the knowledge, skills and attitudes or dispositions they need to teach well, and to continue to teach better as they evolve in their profession" (Lynd, 2005, p.13). The most frequently used terminologies are teacher training, teacher education and teacher development. Teacher training is often used in the same way as teacher education, in its narrow sense however it assumes that through mastery of discrete skills teachers will be effective in the classroom. Teacher training programmes address specific outcomes achieved through a sequence of steps within a specific period of time (Freeman, 1982). Teacher education refers to formally organised attempts to provide knowledge, skills and dispositions to prospective and experienced teachers (Cummings and McGinn, 1997), and as such it refers to both pre-service and in-service teacher preparation as well as various ways of bringing about learning rather than simply the inculcation of skills. Cummings and McGinn view teacher preparation as being an active process within teacher students and not a mere function of a transmission process. Teacher professional development refers to the whole process that begins from pre-service teacher preparation and spans the entire career of the teacher (Lynd, 2005).

In this study, teacher education is used to refer to a formal teacher preparation programme called the Licensed Teachers Programme of the Open University of Tanzania. Student teachers in the programme were provided with study materials and face to face sessions on teaching subjects, pedagogy and teaching practice. In practical terms however the programme included both initial teacher education though distance learning and some school-based teacher learning processes as part of beginning teacher experiences.

1.6.4 School support

It has been proposed that the student support element of DL is a service industry (Sewart, 1993) which meets most of the general criteria for service industries: i) a service industry is an activity; ii) a service industry is intangible and relates to a method of transmitting a product rather than to the product itself - it cannot be transported or stored; iii) a service industry relates a product to its customers such that the production and consumption are connected - the services are produced at the point of consumption or are produced and consumed almost simultaneously; and iv) customers take part in the process of a service industry. Tait (1996) defines student support as those activities which are individualised or delivered in interactive groups (whether face-to-face, by telephone, electronically or in some other medium, such as tutoring and counselling, in contrast with the learning materials prepared for a mass of users without any actual individual in mind. According to Tait (1996) student support is a support

services paradigm that recognises the critical importance of the affective, value-related and social dimensions of distance learning. It is not a 'purist' model of distance learning which advocates that students should receive the specially designed study material and work with it largely on their own. School support is a construct referring to processes at school level that enhance or otherwise impede school-based distance learners.

Various theoretical orientations point to the centrality of school as the right site for support. Literature on beginning teachers provides a theoretical understanding on how schools as workplaces can support teachers. The key argument has been that teaching is a stage-based developmental process involving three stages: self-survival, instruction and impact on students (Fuller, 1987). Beginning teachers mostly fall under the self-survival stage for which their concerns are not on instruction or the learning of their students but building a sense of belonging within the school; learning self-management; building self-confidence; learning through models of good practice and collegial support and encouragement; and adopting an outlook of continuous improvement through self-reflection. Theories on teacher induction, mentoring, teacher learning communities and teacher professional socialisation all follow the same assumption that beginning teachers need support from the school community – head of school, head of department, senior teachers and colleagues - to be able to integrate into the school life. In this study school support refers to various experiences - moral, social, professional and academic - that influence perceptions of the student teachers as far as support for DL is concerned.

1.6.5 First year experience (FYE)

Research on student progress at higher education level has turned attention to first year students. There are basic reasons for this trend. First year is essentially a transition period (Latham and Green, 1997), and thus it is during first year that students build a study foundation that will sustain them throughout the period of study or otherwise fail them in their endeavour to realize their study goals. However, the meaning attached to FYE is not always the same across universities. At one extreme, FYE refers to some orientation packages delivered to first year students as a way of induction. At the other extreme, it refers to a whole year preparatory course to freshmen, who wish to join a degree programme thereafter. Yet there is the notion of a series of special treatments extended to first year students throughout their study while they are in their degree programme. In this study, FYE will refer to the institutional support experienced by the first year students in LTP at OUT, before they could enrol for the second year. The support includes financial (through agreement with sponsor/employer), material, supplemental instruction and social integration.

1.6.6 Licensed teachers

The Tanzania Education Act of 1978 allows untrained personnel to work as teachers, provided they get a teaching license from the Commissioner of Education (now called Chief Education Officer). Teachers in this category are referred to as *Licensed Teachers*. The Act (United Republic of Tanzania, 1978) recognizes the teaching personnel as i) trained teachers from recognized teachers colleges or institutions; ii) untrained teachers applying to teach, by being issued with teaching licenses and iii) trained teachers of foreign origin applying to teach in Tanzania. The procedure for obtaining teaching licenses for those untrained is by making requests through relevant school managements to the Ministry via the Zonal Chief Inspector of schools and Chief Inspector of Schools. Zonal and Chief Inspectors of schools scrutinize requests and make recommendations to the Chief Education Officer. Further scrutiny of the requests is made by a special committee of the Ministry chaired by the Director of Administration and Personnel and recommendations are made to the Minister who approves the prospective requests for issuing teaching licenses. The Chief Education Officer then endorses and issues teaching licenses. Consequently, the Teachers' Service Department (TSD) keeps registers of three different categories of teachers: i) certified permanent and pensionable ii) certified but not permanent e.g. on contract or on temporary terms; and iii) licensed teachers. The teaching licenses are temporary but renewable.

In this study the term refers to those untrained teachers who have been enrolled for a degree in education at the OUT under the special programme called the Licensed Teachers Programme (LTP).

1.7 *Rationale of the study*

The study was conceived at a time when major theoretical and practical realities were taking place both internationally and in Tanzania. At international level, new ideas on teacher education had already been implemented and appreciated, particularly the use of school as a training site for student teachers (Bezzina *et al.*, 2006, Lawlor, 1990, Sankey, 1996, Moon, 1996). The traditional 'theory to practice' model to teacher education had already been challenged particularly for its failure to integrate theory and practice and hence producing incompetent teachers. This study was therefore designed to investigate the current teacher education practices in Tanzania.

For Tanzania, this study meant to follow up the current initiatives in recruiting and training untrained teachers in secondary schools. Understandably the political and social pressures behind the use of untrained teachers meant that the country was inevitably in a position to undergo rapid changes in teacher training. The traditional teacher education modes, whether philosophically effective or not, could not cope with the fast growing demand for teachers. The school-based model was to be adopted

for the purpose. MoEVT had invested on the LTP in collaboration with OUT expecting a return by having the untrained teachers graduating in a three years time, in various degree programmes. This study sought to investigate school realities and make recommendations on what school-based support practices seem to work, so as to ensure the aim is realised.

School-based teacher education and distance learning are not the same concept, although they coincide in that students spend more time outside the university. The former stresses structures and systems developed in schools like mentoring, peer tutoring, cooperating tutors, collaborative research; such that the process of teacher education becomes a shared business of partners. While OUT is a DL institution, little has been published on its use of school-based teacher education, and more generally on the nature of the partnership that exists between the university and schools. This study sought to explore this phenomenon and make recommendations for structuring the teacher education concept, planning and implementation.

1.8 *Scope of the study*

As a practice-based study, this research sought to investigate the current training of teachers by DL and the role played by schools. The study involved statistical analysis of student teachers and school data within the OUT Licensed Teacher Programme as well as in-depth case analysis of a small number of schools. The study further traced the current policies that govern teacher education to locate the role assigned to schools as a potential partner. While following events and progress in schools, the study sought to relate the process with course progress in their first year. Although statistical analysis could be extrapolated and inferred to similar teacher education programmes, the study is limited to contextual realities of the Licensed Teachers' Programme and to the particular students and schools involved in this study.

1.9 *Organisation of the thesis*

This thesis is organised in twelve chapters. Chapter One, the introduction, presents some basic issues on background to the licensed teachers programme, statement of the problem, rationale, research questions and scope of the study.

Chapter Two, education in Tanzania, presents literature and experience on the context and planning of teacher education by distance learning for secondary school teachers in Tanzania. The chapter begins by providing general information about Tanzania and its education system. It moves further to present the government's policies and strategies that have been in place for implementing UPE, and the subsequent expansion of secondary education. The policies on universal primary education (UPE) and

expansion of secondary education appear to have had an impact on teacher demand and a need for radical models of teacher training. The chapter reviews other issues related to distance learning in the country.

Chapter Three and Chapter Four, literature review, cover a range of issues related to this study. While Chapter Three presents literature related to teacher education, Chapter Four concentrates on literature related to distance learning and issues of student retention in distance teacher education programmes. Issues reviewed include changes in teacher education and their influential reasons; the teacher education situation in Africa; and use of distance learning in teacher education in Africa in relation to infrastructural and cultural realities, particularly challenges in the use of computer technology as well as the key issue of student retention.

Chapter Five, methodology of the study, makes a case for the use of the mixed model approach to undertake this study. Data collection and analysis procedures are outlined before discussing the study's rigour and ethical issues. The study combined survey and case studies and then additional data were sought through documents, SMS, emails and telephony interviews. In the chapter it is presented how the mixed model worked as a whole in that the approaches, methods and instruments were developed and used to inform each other.

Chapter Six, the Licensed Teacher Programme, presents the LTP design, its specific student support system, implementation of LTP in the first year, and lastly issues related to LTP student retention by the end of the first year. The chapter draws data from interviews with LTP coordinators at OUT and MoEVT, and a review of various documents obtained from MoEVT, OUT and LTP. Issues presented in this chapter refer to the LTP population as a whole and sets the scene for a presentation of results on the survey sample in Chapter Seven, and case studies in Chapters Eight and Nine as well as SMS and emails in Chapter 10.

Chapter Seven is dedicated to analysis and presentation of survey data collected from questionnaires completed by the LTP student teachers of the OUT. The chapter presents findings related to the demographic and attitudinal data of the students, perceived support need and an evaluation of the actual support rendered. It draws most of its data from the "*Survey on school-based support services for the Licensed Teacher students of the Open University of Tanzania*" administered to LTP students during their first face-to-face meeting in April 2007.

The reality in schools where the respondents of this study were working was a key aspect in the study. The assumption that featured in the whole study was that supportive schools would have a positive effect on student retention of LTP. Chapters Eight and Nine present findings of four case studies. Chapter Eight presents accounts on specific schools sampled as case studies. A general school community and environment is presented for each case, followed by realities within the school structures and practices. Lastly the student data are presented as per various sources including questionnaire, personal interview, interviews with heads of school and OUT records. Chapter Nine makes a cross-case analysis of the cases, following closely the support practices in the case schools as well as tracing how the student teachers learn how to teach. In the analysis, practices in the case schools are constantly compared with data collected from other schools through SMS.

Chapter 10 presents analysis of data collected through SMS and emails. Some quantitative and qualitative data are presented. The chapter presents an analysis on why students persisted or dropped out of the programme. It goes further to trace students' use of mobile phones and computer technology when responding to questions posed to them in this study and attempts to gain some impression on the students' behaviour as far as use of technologies for DL is concerned.

Chapter 11 presents interpretation and discussion of data. It is at this stage that the whole results of the study are discussed and the researcher's own interpretation of the results put together in a consistent way and in the context of existing knowledge. Chapter 11 therefore presents discussion of the findings. The focus of the discussion is on: i) relating the findings to the original research problem and the specific research questions; ii) relating the findings to pre-existing literature and research studies; iii) determining whether the findings have practical significance, that is, whether the findings are usable; and iv) determining the extent to which the findings contribute to the body of knowledge as far as support to DL student teachers is concerned.

Chapter 12, Conclusion, Recommendations and Evaluation of the study, summarises the findings, makes recommendations for practice improvement and for further research. Furthermore, the chapter looks back at the research process and reports on personal reflection of the whole experience.

1.10 *The researcher*

The researcher has worked in the Tanzanian education system, as a secondary teacher and as a university lecturer. After obtaining a diploma qualification in early 1990's, he was posted to a high school in Southern Tanzania where he taught English in O-level classes. After four years of work, he

was transferred to a new rural community secondary school in Southern Highlands. Between 1998 and 2004, he had a long study leave, during which he completed a B.Ed. (Hons.), and an M.A (Ed.) at the University of Dar es Salaam. He then joined the Open University of Tanzania as a lecturer in the Faculty of Education.

Chapter Two: Education in Tanzania

Good teachers are costly, but bad teachers cost more

Bob Talbert (1936-1999) American sportswriter, editor and columnist

2.1 *Overview of the chapter*

Chapter Two is dedicated to a review of literature on the context and planning of teacher education by distance learning for secondary school teachers in Tanzania. The chapter begins by providing general information about Tanzania and its education system. It moves further to present the government's policies and strategies that have been in place for implementing universal primary education (UPE), and expansion of secondary education. These policies on UPE and expansion of secondary education have had an impact on teacher demand and a need for radical models of teacher training.

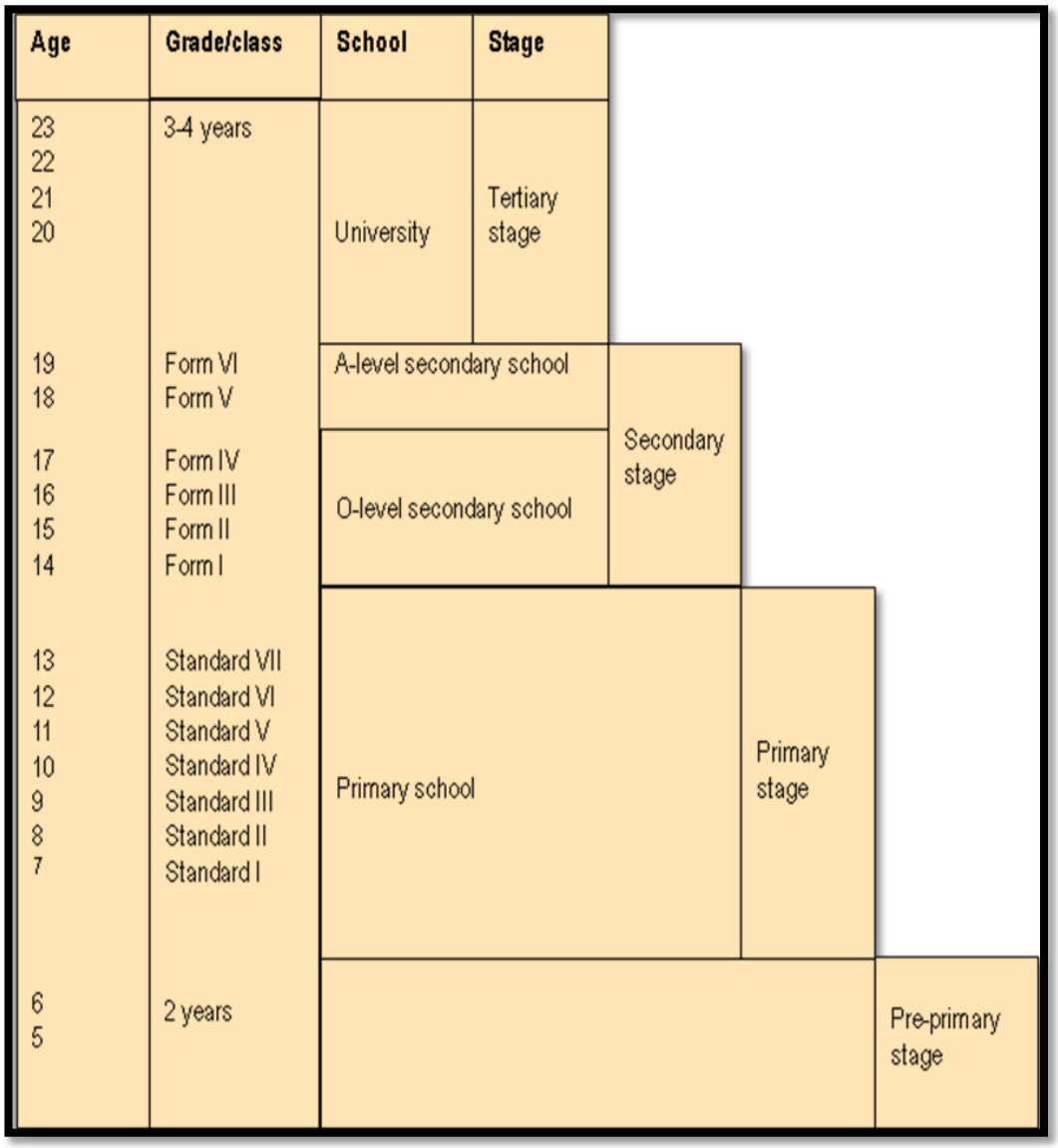
2.2 *Tanzania in general*

The United Republic of Tanzania is situated on the coast of East Africa and has a land area of 945,087 square kilometres (of which Zanzibar accounts for 2,000). The population was estimated at 38.2 million in 2007 the annual growth rate was estimated at 2.1% in 2007 and the average density of population was about 45 per square kilometre for the whole country (United Republic of Tanzania, 2002). The political capital (seat of Parliament) is Dodoma in the centre of the country, but Dar es Salaam (population 2.5 million) is the commercial and administrative capital where most Ministries are housed. The official language, used in commerce and in international dealings, is English. English is also the medium of instruction in secondary and higher education institutions. The most widely spoken national language however is Kiswahili and that is the language of instruction in primary schools and primary teacher colleges. The United Republic was formed in 1964 by the union of mainland Tanganyika, a UN Trusteeship Territory that became independent from Britain in December 1961, and the islands of Zanzibar a former British Protectorate that became independent in December 1963. The Executive Head of State is the President.

2.3 *Education system in Tanzania*

Education is not a union affair, thus the education system in Mainland Tanzania (in which this study was conducted) does not apply in Zanzibar. Formal education in Mainland Tanzania is structured into a system of two years of pre-primary, seven years of primary, four years of ordinary secondary level, two years of advanced secondary level and three years or more of post-secondary education (United Republic of Tanzania, 1995), as presented in Figure 2.1.

Figure 2—1 Tanzania (Mainland) education system in diagram



2.3.1 Pre-primary education

As shown in Figure 2-1, pre-primary education is intended for children aged 5-6. In 2007 there was a population of 2,261,600, 5-6 years olds out of whom 749,647 were enrolled. This enrolment made the net enrolment ratio (NER) of 31.1%. However the total enrolment at pre-primary level reached 795,011, making a gross enrolment ratio (GER) of 35.2%, with an almost equal ratio between boys and girls (United Republic of Tanzania, 2007b). Pre-primary is a government affair, with private institutions accounting for only 2.3 percent of enrolments. The Social Welfare Department of the Ministry of Labour, Youth Development and Sports had registered 762 day care centres, each of which has 50-100 children enrolled, and these are concentrated in urban areas, accessible to those able to pay fees ranging between TSh. 3,000 to TSh. 300,000 per month (Williams, 2006).

2.3.2 Primary education

In 2007, primary education comprised enrolments of 8,316,925 in 15,624 schools. Girls and boys were equally enrolled. The teacher to student ratio was 1:52 and in some regions, like Mwanza, Rukwa, Shinyanga, the average teacher to student ratio exceeds 1:60. Primary schooling was almost exclusively government run, with only 1 percent of enrolments in private schools. In 2007 the NER was at 97.3%, a substantial improvement on the 2002 NER of 81 percent. Late starting means that there are substantial over-age enrolments, and this is reflected in a GER of 114.4% in 2007. Dropout and repeater rates have been improving, but remain high for the transition between Standards IV and V, principally as a consequence of the Standard IV Primary School Examination. After Standard IV, about 11 % of students repeat and 7.4% dropout (United Republic of Tanzania, 2007b). However, recently a new policy has been issued to allow continuation of poor performers to standard V and Form III after the standard IV and Form II examinations respectively, making the examinations a tool for system and school evaluation that does not affect progression of pupils into a higher stage.

Primary completion rates have to be interpreted cautiously in Tanzania. Measured only as enrolments in each grade, the improving repeater and dropout rates mean that cohort retention between Standards I and VII has reached 78 percent, with girls doing somewhat better than boys (79 percent versus 77 percent). However, the completion rate falls drastically if primary completion is interpreted to mean pass rate in the Standard VII Primary School Leaving Examination (PSLE). Due to scarcity of places in secondary schools, not all pupils who pass their PSLE get enrolled in secondary education. In 2005, 520,717 students were enrolled in Standard VII. Of these, 493,946 sat the PSLE and 304,936 passed. “Completion” in terms of those enrolled in Standard VII and who achieved a PSLE pass is therefore 58.6 percent. Of those who passed, a total of 243,359 were offered a place in either a Government or private secondary school. Measured in terms of Standard VII enrolment, the transition rate to secondary school is therefore 46.7 percent. In 2007 primary completers were 664,263, but those who joined secondary schools were 448,448, a 67.5% of the total candidates (United Republic of Tanzania, 2007b).

2.3.3 Secondary education

During independence (in 1961) the transition rate to secondary education was at 35.8%, but the rate kept on falling constantly up to the 1985 low point of 4.3% (United Republic of Tanzania, 2007b). It is important to note that during most of that period, education was an exclusive business for the state. As from 1980s a policy to allow private schools gave rise to private providers of secondary education. The Government monopoly of social services was finally over. NGOs and private institutions and individuals

began building and running secondary schools (Lassibille *et al.*, 1999, Galabawa, 1995, Chediel *et al.*, 2000).

An uphill trend in transition rates has been experienced ever since 1986. However acceleration in the transition rates was at its best trend during the period of implementation of SEDP. Many '*sekondari za kata'* (community secondary schools) were hurriedly built by the *wananchi* (the community members) and in most cases prematurely opened immediately before the 2005 general elections. Politicians seized the SEDP opportunity to campaign for building and opening as many schools as possible, and win the public votes, who were in desperate need for more places for their children. It was a premature idea because most school resources, teachers in particular, were not available yet. The number of Government schools (majority of which are community built) increased from 649 in 2003 (before SEDP) to 2,806 in 2007. Hence, secondary education is displaying dramatic change. In past years its most notable characteristic was its small size, with a GER for Forms 1-4 of only 10 percent in 2002 and of 1.8 percent for Forms 5 and 6. Since then the number of schools has more than tripled (from 1,024 in 2002 to 3485 in 2007) with government schools accounting for most of the increase. Enrolments have almost tripled (323,418 for Forms 1- 6 in 2002) to 1,020,510 (United Republic of Tanzania, 2007b).

The teaching-learning process in secondary schools has been reported to be highly affected by the use of English Language as a language of instruction (LOI). At one moment, the government had to acknowledge:

> *The limited confidence of teachers in English in schools results in repeated 'code switching' between Kiswahili and English in the classroom. As a result, both languages suffer. Neither is taught well but English is particularly endangered as students finish secondary schools without adequate ability to write and communicate in English effectively and efficiently (United Republic of Tanzania, 2000, p.17).*

The debate on LOI has at some moments led to some bitter arguments and exchange of strong and sarcastic language among academics (particularly, of recent, those involved in the Language of Instruction in Tanzania and South Africa (LOITASA) research and other academicians) and between the academics and politicians. In summary, studies on LOI have consistently revealed that "insistence on the use of English adversely affects the learning process" (Rubagumya, 1991, p.67) because students usually have problems switching from Kiswahili, the language of communication, and the LOI at primary school level. While that is true in academic terms, it has been reported that the Government and particularly parents would prefer children to have more English medium schools right from primary school level (Rugemalira, 2002). Indeed other studies have revealed that there is an obvious obsession for English Language among the public, the Government and even within institutions of higher

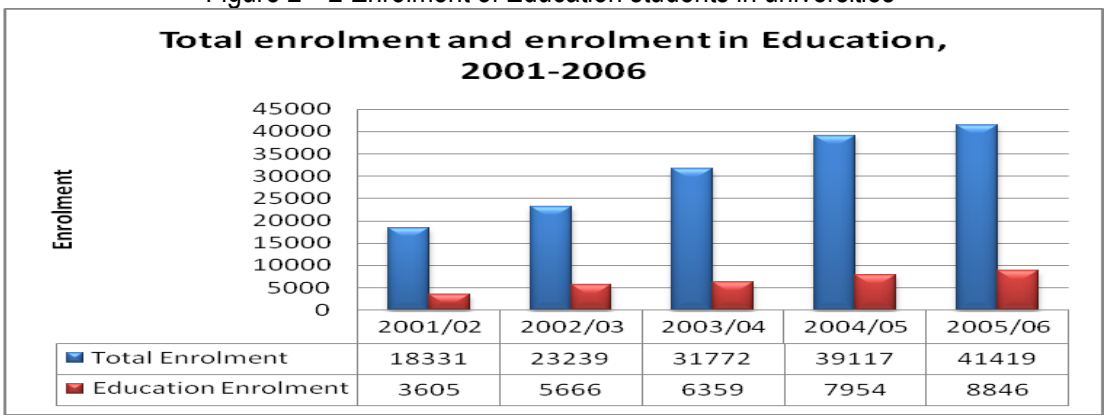
education, which cannot be explained in terms of effectiveness of English Language as a LOI (Brock-Utne, 2007, Brock-Utne *et al.*, 2006, Senkoro, 2005).This trend in preference for change in LOI at primary level contradicts any need in arguing for change of LOI at secondary level; after all English will still be needed at university level, and in addition, life will always be haunted by English Language because, as the maxim goes, *English is the language of science and technology* (Senkoro, 2005).

2.3.4 Higher education

Prior to independence Tanzania did not have a university. Only 70 Africans held university degrees, 20 of them were teachers. They obtained university education at the Makerere University in Uganda or from the Royal Technical College (Now University of Nairobi) in Kenya. A few had studied in Britain and United States.

In 2007, there were 20 universities and 13 university colleges. Although the number of universities has grown very rapidly in recent years their impact on student enrolment has remained little, in terms of enrolment rates. In 2006, it was estimated that higher education in Tanzania accounted for only 1.3% GER (Msolla, 2007). Most of applicants who pass university matriculation do not get access. In 2006/2007, for example, at the University of Dar es Salaam (the major university in the country), 7,049 applicants or 46 percent out of a total of 15,185 applicants who passed the matriculation examination got admission (Ishengoma, 2007). Those who do not get access to public universities like the University of Dar es Salaam do not necessarily opt for the private universities. Ishengoma (2007) observes further that the private universities are characterised by low enrolments as the public has not developed trust in them. One opportunity for the majority of higher education applicants could be study by DL through the Open University of Tanzania. Unlike other public universities, which have a strict selection criterion, OUT takes on board all applicants who meet the entry qualifications.

Figure 2—2 Enrolment of Education students in universities



Source: Calculated from TCU website: http://www.tcu.or.tz/universities.html

2.4 *Teacher education*

Generally, teacher education is conceived as both an academic and a professional area, which facilitates teaching and learning in other parts of the formal education system. While in many countries teacher education is observed as part of tertiary education, this is not the case in Tanzania. A two-tier system in teacher education provision has developed in the country: Teachers' Colleges under MoEVT offering certificate and diploma courses; and universities offering degree programmes (United Republic of Tanzania, 1995). Certificate courses prepare primary school teachers and diploma in education courses prepare teachers for the junior levels of secondary schools.

The network of teacher colleges in Tanzania has been unable to meet the demand for new teachers especially at secondary school level. In 2007 there were a total of 18,754 teacher trainees in Government colleges and 3,763 in private colleges, studying for either certificate or diploma. This enrolment fell from 30,892 in the Government colleges, while in the private colleges the number increased from 1759 in 2004. Entry to teacher training is not a preferred choice to many school leavers. This could be one of the major reasons for low enrolments. While in previous years entry to teacher education was taken by those relatively poor performers in CSEE and ACSEE examinations, the current insistence on at least a division III in the examination results prohibits the majority who would join teaching. The problem is, teaching is not a first choice to many school leavers (Towse *et al.*, 2002).

Universities on the other hand offer education programmes at degree and postgraduate level to secondary school teachers, tutors who train teachers for primary and secondary schools and educational administrators. Other teacher education specialisations offered by universities in Tanzania include adult and continuing education, teacher education, curriculum development and educational management and administration.

The Tanzania Institute of Education (TIE), an institute under the Ministry of Education and Vocational Training, prepares teacher education curricula for the two pre-service programmes: Grade 'A' teachers' certificate and diploma in Education courses. TIE is also responsible for the development of primary and secondary education curricula. Certificate trainees join the course after successful completion of Form Four (ordinary level of secondary education) and diploma trainees join the programme after successful completion of Form Six (advanced level of secondary education). Quality control of teacher education and training in TCs is the responsibility of the Inspectorate Department of the Ministry of Education and Vocational Training (MoEVT) while evaluation and certification is the responsibility of the National Examinations Council of Tanzania (NECTA).

2.5 *Trends and developments in teacher education in Tanzania*

Teacher education in pre-independent Tanzania was dominated by some elements of school-based teacher education. The first African teachers in Tanzania were trained by the Germans at Tanga School from the year 1899 in what was a department for teacher training within the school (Gann and Duignan, 1977). A department was created to train African teachers for African schools and the curriculum included several skills like masonry, carpentry, brick-making, book keeping and accounting apart from teaching skills. Teachers who were trained by Germans at Tanga School were eclectic in the sense that they could be used as school teachers, tax collectors and overseers of building construction and other projects.

An expanded teacher education programme in pre-independent Tanganyika started during the British rule and the first programme was for village school teachers. Those who joined this programme completed Standard Six which was the top class in what were called District Schools or Central Schools. At this time, training of teachers was conducted in selected District Schools and they were called Teacher Training Centres. As such, teacher training centres were not independent entities from schools. Those who joined this programme were the best performers in the school system. This programme was phased out in 1950 when primary education was re-arranged into two cycles – the lower cycle of four years (Standard One to Four) and the upper cycle of four years (Standard Five to Eight) (Morgan, 1965).

From 1950, there were two teacher training programmes which were conducted in the then Tanganyika: Grade Two programme which prepared teachers for elementary schools (Standard One to Four) and Grade One programme which prepared teachers for middle schools (Standard Five to Eight). Grade-Two teacher education programme was a two year programme for those who completed Standard Eight and wanted to become teachers. By this time, training centres were separated from normal schools and called Teacher Training Colleges (TTCs). At independence, the Grade Two programme was renamed Grade C.

Grade One teacher education programme started in the 1950s aiming at producing teachers for middle schools for Africans. The programme was first conducted in normal secondary schools but later was transferred to TTCs. Examples of schools that had teacher training programmes are Minaki in the Coast Region and Ihungo in Kagera region. It was a two-year programme. Those who joined this programme completed Standard Ten which, by then, was the second year in the secondary education cycle. They were the second best, after those who were selected to join Standard Eleven. However,

since secondary education required the payment of fees, those who couldn't afford for Standard Eleven education joined teaching. After independence in 1961, Grade One teacher education programme was renamed Grade B and it remained an upgrading programme for Grade C teachers. This was a result of phasing out Territorial Standard Ten Examination by extending all secondary schools to Standard Twelve (Form Four).

The emphasis of Grade One and Two teacher training programmes was on teaching methods (teaching skills and pedagogy) although the academic part was not completely ignored. More time was used in subjects like classroom management, the use of teaching aids including the blackboard, preparation to teach and the practicum. At independence, most of TTCs (eight of them) were owned by Christian denominations and run by missionaries (Mwilapwa, 2002, Kilaini, 1998). This pattern was a result of the fact that most schools were owned by churches, although most of them were of small size. At independence, Tanganyika had only two government teacher colleges (Butimba and Mpwapwa). Further teacher education opportunities (at diploma and degree levels) to Tanganyikans were obtained from overseas and at Makerere College in Uganda.

Immediately after independence, a new grade 'A' certificate course was introduced to prepare teachers for upper primary schools instead of Grade B which remained an in-service programme. Furthermore, institutions for further teacher education and training (above certificate level) were established. The University College of Dar-es-Salaam started to offer three-year degree programmes (Bachelor of Arts and Bachelor of Science) with a teaching component in 1964. Most of the graduates in these programmes went to teach in secondary schools and in teacher training colleges although a significant number of university graduates were given administrative posts, sometimes, out of the education system.

In 1965, Dar-es-Salaam Teacher Training College (Chang'ombe) was established to offer both Grade A certificate course and the Diploma in Education programme. At the same time, teachers colleges offering grade A certificate programme were increased from five in 1965 to nine in 1970. This was made possible under the nationalization policy of all denominational TTCs, a step which made the Government the sole provider of teacher education in Tanzania. Teachers Training Colleges were renamed Colleges of National Education until 2000 when they came to be known as Teachers' Colleges (TCs).

In the year 1965, the Government decided to phase out grade C certificate course. However, it was soon realized that this programme was important to meet the requirements for the expanding rural

primary school system and the planned target of achieving Universal Primary Education (UPE) in 1989. As a result, from 1970, the grade 'C' teacher training programme was intensified by converting some upper primary (middle) schools into TCs.

All teacher education programmes in TCs were conventional and residential. The emphasis of teacher education curricula shifted from pedagogy to academic inclination. Most of the time in the training period was used in increasing the understanding of the subject matter of subjects they will teach after graduation. The training period for both Grade A and C certificate programmes was two years in TCs but the Grade C programme had the third year in schools despite the fact that the final examination was done at the completion of the second year.

From 1974 efforts were directed towards meeting the requirements of a large number of teachers to handle primary schools opened to meet the Universal Primary Education (UPE) by 1977. This was a political decision by the ruling party that argued that primary education is one of the basic human rights. The period to train Grade A teachers was reduced from two years to one year. To get teachers for new schools, a distance teacher education programme for grade C teachers was introduced in 1977. By the time this programme was phased out in 1982, a total of 37,998 grade C teachers were already trained at distance (Babyegeya, 2002).

From 1981, there was a change in the way of thinking. The distance teacher education programme for the Grade C was abandoned. Distance education in teacher education was left to continue for in-service programmes. The two-year training period for both diploma and grade A teachers was restored. A three year Grade B programme was introduced and, in fact all grade C teachers were renamed Grade B teachers. The grade B certificate programme was also phased out in mid 1990s. Despite all these changes, the emphasis remained on subject matter at the expense of pedagogy.

Policy and practices in education since independence have been a struggle to balance quantity and quality (Smyke, 1961). While the demand for educational opportunities continued to rise, the quest for quality education started to emerge very strongly in the 1980s. This was because the expansionist policy that was pursued in the 1960s and 1970s started to bear some negative effects. Complaints of deteriorating standards of education at all levels were expressed more openly than before and dominated the education discussion in the 1980s (Omari and Mosha, 1987, Ergas, 1982). Teacher education was one of the factors observed to contribute to the decline in the quality of education.

The two-year training period for Grade 'A' which was shortened to one year was restored in 1980. In the same year, the University of Dar-es-Salaam, which was the sole university in Tanzania in training graduate teachers, increased the training period for education students from three to four years. Emphasis was on the theoretical part of teacher education namely, learning psychology and educational foundations. New courses were introduced in areas of guidance and counselling, special education, and educational research methodology. However, pedagogy and teaching skills (i.e. how to teach) were not given significant consideration in the curriculum.

Three major in-service programmes were introduced in the 1980s. They included the 'C to O' programme which aimed at providing secondary education to Grade 'C/B' certificate teachers, the 'C to A' which upgraded grade 'C/B' teachers to grade 'A' teachers and the 'A to Diploma' which upgraded grade 'A' teachers to a diploma level. The first two programmes aimed at increasing the quality and competence of primary school teachers. However, the A to Diploma programme was used to get secondary school teachers. Since those who joined A to Diploma programme were primary school teachers, it brain-drained primary schools by depriving them of competent and capable teachers. Meanwhile, the two-year Grade A teacher education programme was reduced into one-year college based programme, which contributed to an increase in number of teachers to around 86,000 by 1983. The programme recruited secondary school leavers, and this has been the norm for teacher education for primary school teachers. As a result of effective recruitment of Grade C and B, at around 1980 the two-year programme resumed. It is argued that the whole primary school system was flooded by Grade C/B teachers with Grade A making only a quarter. Training of secondary teachers has followed a similar trend. Babyegeya (2002) reported that at some time of high teacher demand in 1970s a Diploma in Education programme at Dar es Salaam Teachers' College took nine months training of college training instead of two years, but was later the two-year programme was to be restored in 1980.

However, in late 1980s and 1990s, a programme popularly known as 'sub-combination' was implemented so as to increase the pace of secondary teacher production. This was a reaction to the high demand for teachers in the community and private schools as a result of implementation of UPE. Many community and private schools were built in the mid 1980s as a result of increased primary school completion (Galabawa, 1995). The sub-combination programme sought to combine upper secondary education and teacher education in some identified teacher training colleges. The programme recruited secondary education leavers who qualified for upper secondary education to study two years of high school during which they studied Education on top of their subject majors, plus a third year of teacher training courses. At the end of the third year, students were awarded a diploma

in Education. The otherwise normal route for a qualification for Diploma in Education was a two-year college-based academic course and professional knowledge and skills. Special colleges were earmarked for different subject specialisation. The colleges were Korogwe (humanities – English Language, Kiswahili, geography, and history); Monduli (agricultural science); Shinyanga (commerce); and Mkwawa (science and maths). The rest of the colleges continued with the normal two-year diploma programme. No specific study evaluating the effectiveness of the sub-combination route programme was identified. However, of all the fast-track programmes this programme did not attract much controversy, if any. In fact, judging from the performance of the teachers, this programme could be one of the most effective programmes the country has ever embarked on. However, there has been an argument that using teacher education facilities for secondary education is unwise as it is never cost-effective. This programme was eventually abandoned.

When PEDP was implemented in 2002, once again a one year college-based programme was re-introduced. Students were introduced to teaching and other related courses, without subject knowledge. The second year was to be spent in the school, where the student had to undergo some school-based teacher education. The Government admits that within two years of implementation of the programme the demand for teachers had been almost met (United Republic of Tanzania, 2004c).

As a response to teacher demand brought about by SEDP, a one year diploma programme was re-introduced. The academic aspect of teacher education was not emphasised. The emphasis was on pedagogy. (Ironically, this is the time around which the one-year programme for primary teachers was abandoned). High school leavers were to undergo a one year of college-based teacher training (without the subject specific education), and another year school-based. It was also planned that an OUT Diploma programme for secondary teachers would be introduced for the purpose. However, there is no evidence that the OUT programme for diploma secondary teachers has been implemented so far.

2.6 *Distance learning in Tanzania*

Distance learning in Tanzania, as in many African countries, is not a new idea. It has been used to train practitioners across sectors of public and private services. In 1964 correspondence courses were introduced at the Moshi College of Cooperatives as an element of mass education, to help raise the literacy level among cooperative members (Donge, n.d). The experiences of the cooperative correspondence education are associated with the massive DL programme for teachers that was to be implemented in mid 1970s (Chale, 1993).

In 1970 the National Correspondence Institute (NCI) was established with the purpose of providing correspondence courses for basic, secondary and professional studies. By 1989, (Cutting, 1989) observed that the NCI was the country's largest producer of correspondence materials. It had a total enrolment of 63,000 students at basic, secondary and professional levels, but "the only medium used is the printed word" (Cutting, 1989, p.16). By 1994, a total of 57,088 people had already completed correspondence courses at the institute (Mmari, 1999).

Since 1994, the Southern Africa Extension Unit in Tanzania, with assistance from the United Nations Higher Commission on Refugees, had a distance education programme for refugees from Burundi who were living in camps in Western Tanzania. The programme offered basic English study to the French-speaking Burundians, as well as mathematics, history, geography and Swahili at the secondary level. Its purpose was to prepare the refugees to take advantage of other educational opportunities available in Tanzania. Saint (1999) established that in 1999 the programme had enrolled 800 students and had produced over 2000 graduates.

Between 1989 and 1990 a DL project was conducted in the Northern Zone of Tanzania to train 41 doctors using modules, briefing and debriefing workshops, face to face sessions and supportive visits by tutors. Learners in each region of the zone had resident tutors who acted as both technical advisers and counsellors. Learners were given books and other reading materials, calculators, and a diary – to encourage them to plan and organize their studies, to record the length of time spent on their DL, and with colleagues, and to record any difficulties or problems that they might encounter. This project recorded a success and recommended that "while travel of tutors adds to the cost of the course, it undoubtedly adds much more to its strength, and we recommend that such contact should be established in any programme" (Ndeki *et al.*, 1995, p.63).

A diploma in nursing offered in DL mode was established in 2006 in Tanzania by the Aga Khan Development Network (Aga Khan Development Network, 2007). It aims to upgrade the knowledge and skills of Enrolled nurses to the level of Registered Nurses. Students follow modules covering general nursing skills and health-care practices through designed materials that allow for study at home and in workplace, audio-visual tutorials, followed by discussions with tutors and clinical practicum which are supervised by qualified Registered Nurses.

A Commonwealth of Learning (COL) project (Zachmann *et al.*, 2005) reported on use of DL for training agricultural extension officers in Africa. The project was implemented in 2001 in Namibia, Zambia, Tanzania and Uganda. The idea of the project was to train agricultural extension officers who would

work on encouraging growing of crops that reduce poverty, improve food security, and protect natural resources. They identified two crops to begin with: cowpea and soybean. The programme used print materials, residential training sessions, field exercises and visits with farmers. Eight learners dropped out while 67 completed successfully. Key findings and recommendations of the project included 1) DL was relevant and valuable for continued learning for the extension officers who otherwise would not have an opportunity to keep informed of scientific and technological updates. 2) To some participating institutions in the project the DL materials developed by the project were good enough to be integrated into their mainstream education; and 3) Modern ICTs were still out of reach at many places, which did not function satisfactorily in all places either. Access to additional reading was limited for most learners. In addition, internet availability was difficult and costly.

2.7 *Previous distance teacher education in Tanzania*

The 1970s UPE policy led to a huge demand for primary teachers amounting to about 40,000. By then it was decided to recruit primary school leavers, and deploy them in schools as they underwent some DL training. The policy has for years been debated as to whether it was the right move toward education improvement in the country. Literature on DL for teacher education (Perraton and Potashik, 1997, Moon, 1998, Moon *et al.*, 2005, Chale, 1993, Creed, 2001); and studies on UPE and Education for All (EFA) (Williams, 2006) generally regard the Tanzanian experience as an important milestone on the whole UPE realization process, without which it would have been impossible for the country to reach the literacy peak it enjoyed in 1980s. Of course, much argument by these writers is centred on the quantitative side of the programme - that, the 40,000 teachers were swiftly trained within a period of three years, through a programme which was innovative and radical.

Attempts to justify the results of the programme in terms of quality have been made, but with clearly strong counter arguments. For example, it was argued that the DL trained teachers were as good as those trained in college, especially in practice (Chale, 1993). Williams (2006) asserts that although there is no doubt that Tanzania was only able to achieve what it did through the use of emergency measures which included a good deal of improvisation in classroom accommodation, organising of schooling by half day schooling/double shifts, and the massive resort to special teacher training programmes; any attempt to justify the achievements need to be discussed in quality terms, not just numbers and percentages. He further points out:

> *Due to large classes and many poorly trained teachers (including some who had previously failed primary school exam) quality of learning was affected, especially in science, math and English. That was the beginning of quality decline (p. 9).*

"The beginning of quality decline was the policy on deployment of untrained teachers in the schools", so is the argument of many educational thinkers on the education system in Tanzania. They actually point out that the UPE policy was a black spot in the history of education in the country that must not recur. They argue that the policy all did was to 'universalize illiteracy' instead of universalizing education. Lindhe *et al*, (2005, p.44) for example point out that

> *The Government has always been forced to play down the issue of quality in favour of attaining quantitative Universal Primary Education. Distance methods and strategies for training primary school teachers were adopted in addition to the college based training, the duration of which was reduced from two to one year during the seventies. Concern about the quality of teachers and of education in general continued to deepen as shortages of teaching and learning materials worsened in the eighties. The introduction of cost-sharing measures requiring beneficiaries of education to contribute to the cost of their education worsened the standards, which were already low. Effective training duration was very much reduced from an average of 72 weeks to 50 weeks.*

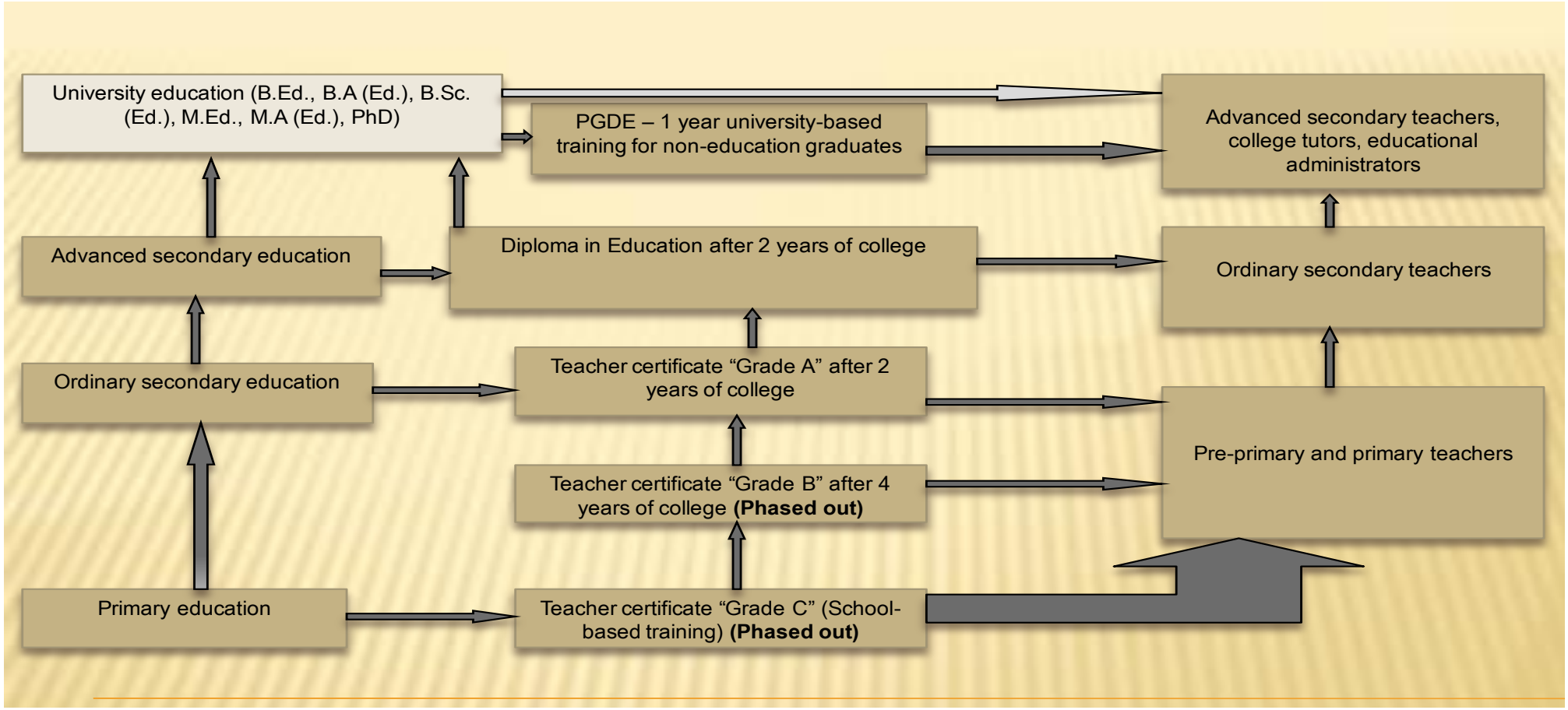
The quality dimension is what bothers many of the writers. Williams (2006) refers to the situation as unteachables being granted the job of teaching from their day one of teacher training, as many of them started as school volunteers in their nearby primary schools. Galabawa (2001) has also expressed discontent with the programme. He argues that the quality dimension of the UPE programme was not taken on board. The Grade C teachers that resulted from the UPE fast-track training programme were shown by the Government to be out of date and it threatened to phase them out of the system if they failed to upgrade themselves to Grade A level by the end of 2007 (United Republic of Tanzania, 2001c). As primary school leavers, in order to qualify for Grade A teacher training, they were firstly required to take a course on secondary education, pass at least Division Three, and then undergo the Grade A college-based teacher training. Obviously the process was too complicated for many of the Grade C/B teachers. If the Government was to implement the phase-out plan then most of the Grade C/B teachers would be out of their job, as for whatever results, their academic and professional progression was out of reach. The attempt however did not materialize due to the fact that their number was still large (see Table 2-1), and removing them would lead to a crisis. The PEDP needed more and more teachers.

Table 2—1 Teacher qualifications in schools and teacher colleges in 2007

	Graduates	Diploma	Grade A	Grade C/B or untrained	Total
Pre-primary	60	330	11,815	6,258	18,465
Primary	367	4426	109,803	42,068	156,664
Secondary	4891	19259	268	5440	29858
Teacher colleges	392	499	21	31	943

Source: BEST (United Republic of Tanzania, 2007b)

Figure 2—3 Teacher education and training progression in Tanzania



2.8 *Politics and the current use of untrained teachers in secondary schools*

Some critics have argued that SEDP is more troubling than the previous teacher education programmes since it involves the preparation of form six leavers for teaching in only four weeks. There have been various negative points justifying this perception. One very strongly argued is that SEDP was hastily implemented without sufficient planning. "If they knew they were going to have massive development of the (secondary education) sector why didn't they train teachers before?" asks one Tanzanian blogger.

A point particularly raised by the Tanzania Teachers' Union is that of fast track approach to preparation of teachers. It has been asserted that the SEDP teachers are academically weaker than other teacher trainees (Oluoch, 2006, Osaki, 2004, Wedgwood, 2007b) but are they really? Oluoch (2007) writes:

> *In order to address the (teacher shortage) problem, the government made a decision to employ 3,500 form six leavers (A Level) for 2006/07 financial year who normally have very weak academic qualifications, giving them less than a month's training and posting them to teach in rural areas (p. 56).*

Wedgwood further notes:

> *Given that the majority of form VI leavers getting division II and above will have found places at universities, these licensed teachers tend to have fairly low A' level grades. A promise that after two years of teaching they will get a place at university has made it more attractive than the alternative path of entering teacher training college and so entry to the programme was relatively competitive for the first year (p.392).*

Wedgwood's quote depicts a contradictory argument. While she attempts to build a case for lower academic qualities of the licensed teachers she ends up revealing that the licensed teacher route came with attractive incentives that could attract student teachers who otherwise would have gone through the college route. The argument goes further by pointing to the period of induction, the one month training as a 'diploma mill'. Babyegeya (2004, p.30) observes:

> *It would not be a surprise if one considers the SEDP teacher training programme as "a diploma mill". The programme might be thought of as having been developed on presumptions that anyone can be a teacher. This form of training "professional diploma teachers" may undermine the very teaching profession and adversely impact the quality of secondary education in the country. The teachers thus trained may graduate without the necessary teaching knowledge and skills that are required of an effectively functional professional secondary teacher.*

The line of argument goes on to allude to the previous "failures": We failed in the past why do we have to do it again? Much of such scaremongering arguments against licensed teachers have been, in the words of Wedgwood (2007), "reminiscent of UPE policies" (p.392). The argument has been that in the 1970s attempt to provide UPE in the shortest possible time demanded that many teachers be trained in

as short a time as possible. DL methods were employed and teachers were made available to serve mass enrolment of the children who joined primary schools. As it turned out, the argument goes; UPE teacher training programmes were not comprehensive enough since they were hastily conducted. Extra efforts were later to be made to upgrade the UPE teachers. However, upgrading of the teachers remains unsystematic and the impact of the semi qualified teachers continues to haunt the system by for example, additional financial costs have to be met in the upgrading process and some of the teachers are not willing or unable to pursue required upgrading programmes.

Probably the strongest point of argument has been the use of statistics, some quite scary. Several writers on SEDP have cited Wedgwood's (2007) argument (claimed to be obtained from the original SEDP documents) that "it is proposed that the training of licensed teachers will become the main source of new teachers, with over 30,000 licensed teachers entering schools by 2010" (p.392). The trouble with secondary citing is that it assumes correctness of information thus bothering not to trace the original source of the information. There exists no evidence in the SEDP paper or indeed in its implementation, of having such numbers of licensed teachers. The World Bank report on SEDP (2008) provides a summary on teacher recruitment during the initial three years of SEDP implementation. Between 2005 and 2007, new teachers hired were as follows:

Table 2—2 Recruitment of teachers in Government secondary schools (2005-2007)

Teacher level	Number of new teachers	% of new teachers
Degree level	2110	7.4
Diploma level	12954	45.8
Licensed teachers	12976	45.9
Retirees	250	0.9
Total	28290	100.0

Source: World Bank, 2008

The Government had initially planned to recruit 4000 trained teachers plus 10-20% of untrained teachers who would be trained in-service. The targets were of course unrealistic and they were exceeded, although the desired pupil-teacher ration (PTR) of 1:30 was not reached, as schools increased beyond control. By the end of 2007, the PTR was 1:34 (World Bank, 2008).

Much of the current debate on whether or not SEDP was 'hastily' implemented needs to accept the fact that the SEDP opportunity came by storm. The country almost unexpectedly had qualified for a World

Bank grant and loan that was to be used in some prioritised socio-economic items. Therefore much educational planning prior to SEDP suddenly became unrealistic. During preparation of the Teacher Education Master Plan (five years earlier) the rationale for having untrained teachers in secondary schools was that teacher training colleges did not cover all the subjects taught in secondary schools and TCs, such as agriculture, home economics, commerce and technical education. However, TEMP estimated that there were only about 120 untrained teachers in such fields serving in secondary schools and TCs (United Republic of Tanzania, 2001b).

The scope of TEMP was limited to the then small secondary education sub-sector. For example, it was rationalised that teacher professional development at school was required because teachers were expected to grow professionally as professional inputs to teachers had tangible impact on students. This was planned to be effected through orientation of teachers. The then Ministry of Education and Culture (now Ministry of Education and Vocational Training) had reviewed school and teacher education curricula. The review demanded orientation for all tutors and teachers so that they could respond positively to the objectives of the education and training at various levels. The strategy adopted by TEMP was "to develop and establish standards of practice in classroom; and develop tailor-made orientation and other professional development programmes by 2002; and its implementation in schools by 2005" (p.42). The fact that schools could soon need some well planned mentoring programmes of beginning and untrained teachers did not feature in TEMP.

At that time even teacher colleges were underutilised. While the capacity of the TCs was about 14,500, enrolment in 1999 was only 8,542 students (60% of total capacity). Tutor-student ratio was 1:9.4, which, according to the Ministry, was far below the Sub-Saharan ratio of 1:23. The average number of lessons taught per week was less than 16. This was also below the recommended minimum level of 24 teaching load per week. These ratios revealed gross underutilization of both human and physical resources in TCs. TEMP attempted to set out strategies to utilise the physical resources and personnel more effectively. Some underutilised resources were actually put to alternative use. Some college tutors were transferred to secondary schools where they would find enough workload. By December 2002, more that 600 million (Tanzanian Shilling) was to be used for deploying staff to where they fitted best, and to put to alternative use some of the colleges found not cost effective as per rationalisation study by 2002.

A teacher management issue then was balancing supply and demand of teachers especially between rural and urban schools. While statistics showed a low PTR, usually there were discrepancies between

schools, as teachers preferred to work in certain regions and towns of the country (mostly because of some genuine reasons). While there was underutilisation of TCs, more schools were being established than the number of teachers graduating from the TCs and universities. Secondary education expansion, coupled with teacher outflows (retirement, deaths and other options) demanded training of more teachers. (But the then option was not to increase enrolment because after all the PTR in secondary schools was far too low). There was another problem with the PTR calculations. Usually, computation of PTR tended to include not only classroom teachers but also education administrators. The calculations also included teachers who were on long study leave. Majority of upgrading secondary teachers never returned to their former schools especially if the schools were in rural areas or in some regions in South and West of the country.

TEMP therefore aimed to improve supply of teachers in pre-primary, primary and secondary schools according to demand, by conducting needs assessment of required pre-primary, primary and secondary school teachers, re-deploy and rectify the rural/urban distribution of teachers in schools, terminate accordingly the service of those not willing to be re-deployed and up-graded, and of more importance to this study, to "make actual projections for new teachers required, and train according to projected demand" (p.57). The actual projections of teachers were to be ready by 2004 so that training could begin in 2005. Over 1.2 billion (Tanzanian Shilling) was to be spent on this exercise. The rest of the story has already been hinted in Chapter One. The Lewin study came up with the projections by the end of 2003. The projections for secondary teachers revealed that demand was far beyond reach, without deployment of untrained teachers, not only because TCs were unable to accommodate large numbers of trainees but also because the training had to coincide with ongoing expansion of secondary education.

2.9 *Conclusion*

The use DL for in-service initial teacher training appears to have featured the Tanzanian education system since early 1970's. The reason for adopting the policy has been pressure to increase the number of teachers whose demand has been far too high for the college-based teacher training route. Expressed in such terms, the teacher training programmes appear to have overlooked the quality aspect. Literature surveyed points to the fact that the choice of DL has been reached by politicians without reconciling with education experts who appear to emphasise thorough planning at the design stage.

The history of teacher training in Tanzania appears to be an account of emergency teacher preparation. The UPE and secondary education expansion in the country have been, at different historical points, implemented within a high demand of resources particularly teachers. As a result, the Government has been forced to deploy untrained teachers in schools hoping to provide them with initial training on the job. It appears however that Tanzania could not have enough teachers without using the fast-track training models. This reality calls for better ways of using such models rather trying to escape from them.

Chapter Three: Literature on Teacher Education

In a completely rational society, the best of us would be teachers and the rest of us would have to settle for something less - Lee Lacocca, (1924 ----) American Engineer and Industrialist

3.1 *Overview of the chapter*

Chapter Three presents a review of literature on teaching and teacher education and support for student teachers. The chapter begins by presenting a review of literature on teaching and teacher education in Africa with special focus on Tanzania. It moves further to present philosophical debates on how teacher education should be addressed. Then, it brings in a review on student teacher in distance learning as a model for teacher education. Finally the chapter presents literature that attempts to associate specific support for student teachers with student progress and retention.

3.2 *Practical issues regarding teaching and teacher education in Africa*

Literature about teaching and teacher education in Africa paints a pessimistic picture such that meeting goals on widening access to education appears to be in jeopardy. There are several areas of concern. Perraton *et al* (2002) suggest that the pupil population grows faster than that of teachers. The AIDS pandemic is recorded to be reducing the life expectancy of teachers. Yet colleges cannot be expanded because of financial limitations.

It has been observed that in most countries teacher qualifications do not meet the set standards (Perraton et al, 2002) and that it is estimated that about a half of the teachers in developing countries are unqualified according to standards set in their own countries. They have the same education level they are teaching and that their teaching methods are old fashioned. In Tanzania, it has been asserted, poor quality of teaching and learning was caused by the 1970s push for realisation of UPE (Wedgwood, 2007) that saw primary school leavers become teachers who then produced poor school leavers, some of whom joined teaching, to perpetuate a poor education system. In Ghana, the Ghana News Agency reported the Deputy General Secretary of the Ghana National Association of Teachers (GNAT) complaining about the large number of untrained teachers in classrooms throughout the country: “The population of untrained teachers was as high as thirty percent and this was negatively impacting on the performance of the pupils in schools where such teachers taught” (Ghana News Agency, 2009).

It has further been observed that about a quarter of teachers in Africa would leave teaching if they found a similarly paying job, within ten years of starting teaching (DeJaeghere *et al.*, 2006).

Contributory factors for needing to drop out of teaching include poor working conditions and low salary. To make the situation even more complicated it has been reported that most leaving teachers do so in their early years of deployment (Schuh-Moore *et al.*, 2007). In Tanzania, Lewin (2003) estimated that 50% of graduate teachers would leave teaching within five years of graduation. Graduate teachers in Tanzania are more likely to leave than are diploma teachers, for jobs in the private education sector or for graduate studies after which they would not return to schools especially if the former school is in a rural area.

DeJaeghere *et al* (2006) describe the situation in African schools as being in need of mentoring, more teacher-teacher interaction and more emphasis on teacher professional development. It has been observed that naturally the teaching job is cellular and isolated (Lortie, 1975) and that if teachers do not interact they lose morale and pedagogical skills. They hence know little about how others teach. They may even lack the culture to seek advice from peers. According to De Jaeghere *et al*, mentoring, where it has been implemented, has helped new teachers understand and adapt to the realities of teaching and even retention. A study in Tanzania on teacher professional development (Komba and Nkumbi, 2008) showed that a majority of respondents (school teachers and officials) perceived teacher professional development as being important because it improves the teacher professionally, academically and technically; but added "However, most respondents think it is inadequately supported and motivated, (such that) at all levels (national, district, ward and school levels), teacher professional development is poorly coordinated and rarely budgeted for" (p.79).

Attracting and retaining teachers in rural areas is an issue in many African countries. There seems to be a wide gap between rural and urban areas in terms of availability of social services including learning facilities for teachers, in which case the rural areas are more poorly served. As a result, teachers do not prefer to work in such areas. In Ghana, for example, "posting to a rural community and teaching at the primary level are not the first choices of many of those trained" (Akyeampong and Lewin, 2002, p.346). In Tanzania, urban schools have more qualified teachers than those in rural areas. The rural schools can mainly rely on the locally recruited teachers who are more likely to stay in such areas. New teachers posted to rural areas fail to show up or seek transfer to urban areas. The problem is that when transfer is not granted teachers drop out of the job. This trend has led to urban schools having more teachers than the rural ones. Poor working conditions in rural areas is the main reason (Sumra, 2004); as well as lack of incentives (Wedgwood, 2007a, DeJaeghere *et al.*, 2006, Mulkeen *et al.*, 2007). De Jaeghere *et al* (2006) suggest adoption of bonus pay particularly as all teachers who

were researched indicated that they were underpaid. However the problem that could emerge in adopting such a policy would be how to identify the best teachers to be paid the bonus.

In Tanzania, there is no specific policy on incentives for teaching in hard to reach areas. The only suggested approach was to construct staff houses in schools (United Republic of Tanzania, 2004d) although the plan has not been implemented. Better teachers are found in urban areas, urban schools have lower than the average pupil-teacher ratios, pupils in rural areas perform lower as per results for reading and mathematics, and rural schools have more scarcity of female teachers because females especially are likely to make immediate transfers to urban areas (Mulkeen *et al.*, 2007).

Schuh-Moore *et al* (2007) observed that in most parts of Africa subjects like mathematics and science in secondary schools lack teachers. In Tanzania, schools without a teacher in mathematics or science or even English Language are not uncommon. Wedgwood (2007) reported of a secondary school that had been for years operating without a single teacher in mathematics. The irony is that student performance in examinations may not rely on school teachers; it may instead depend on whether the student attended private tuition outside the school (Osaki and Njabili, 2003). Wedgwood (2007) observes that deficiency in the education system is often compensated by private tuition, a teaching business that has erupted in the country as a result of teachers' under-pay, whereby school or solo teachers establish private tuition centres for extra income. This could be another loophole for teacher irregular attendance and even attrition.

Described by Perraton et al (2002) as a bottleneck in teacher preparation, teacher colleges appear to have a limited capacity in training enough teachers, due to various reasons. One of the problems is that there are less school leavers choosing to join teacher education programmes, even when entry qualifications are at bare minimum. Wedgwood (2007) cited a source at the University of Dar es Salaam in Tanzania reporting that even when entry qualifications were lowered to two E's and an S (of the ASCEE results) the science teacher programme could not attract the required number of students. At a system level Wedgwood (2007) observed that the Tanzanian education system had an underdeveloped post-primary education system such that secondary school leavers were usually too few to satisfy the need of various competing sectors. The Tanzanian government has reported that "the best people do not get into teaching until they have tried and failed in other professions due to the unattractive nature of the teaching profession" (United Republic of Tanzania, 2001b, p.38).

3.3 *Learning how to teach: philosophical stance for reforms in teacher education*

By the beginning of the 1980's, debates on an increased role of schools in training teachers were featuring in teacher education circles (Furlong *et al*., 1988). It is recorded that although in England and Wales, the acceptance of the school-based teacher education was in early1990's; the idea was not entirely new. Furlong *et al* (1988) trace the origin back to 1944 when it was first suggested that "the key to effective training (of teachers) was to give the practical side greater weight (in which) staff of schools in which the students were placed on teaching practice should be primarily responsible for directing and supervising them" (p.4). The idea that teacher education is a process of specialized professional preparation is what triggered the shift from college-based to more school-based teacher education initiatives.

In England, the trend in change of institutions responsible for preparing teachers according to Bell (1981) was a result of demand for a different focus on teacher training, from teacher training colleges, to college of education to institute of (higher) education; each of which carried a different philosophical meaning and focus. The teacher training colleges, according to Bell, focused on producing the 'good teacher' - one with moral responsibility. As such, the role of teacher training was to provide some 'charismatic education' some teacher qualities that would enable the teacher to perform. Colleges of Education that followed the TTCs in 1960s sought to produce educated teachers. Emphasis was on education not training. Institutes of Higher Education that followed the Colleges of Education, according to Bell, sought to prepare teachers as experts. Therefore teacher training became part of the higher education system and within universities where they *"were to be equipped with analytic, intellectual skills to enable them to improve and evaluate their classroom performance"* (Bell, 1981, p.17). The emergence of the teacher education institution (TEI)-school partnership therefore could be associated with the public demand for a better system for teacher preparation. By the beginning of 1980's the UK Department for Education and Science issued a series of statements on teacher training. One of those was that the initial teacher training of all qualified teachers should include studies closely linked with practical experience in schools and involve the active participation of experienced practicing school teachers.

Literature on initial teacher training in the UK reveals a significant role placed on schools in training teachers. The DES funded project *School-based Training in the PGCE* (Furlong et al, 1988) that involved research at the University of Leicester, University of Sussex, Leeds Polytechnic, and

Roehampton Institute of Higher Education was one of the earliest government initiatives to formalise school-based teacher education. The following were among the key findings of the project:

- Learning to teach was at four levels: a) direct practice in which training was through experience in schools and classrooms; b) indirect practice - detached training in practical matters conducted in classes or workshops within the training institutions; c) practical principles in which critical study of principles of practice and their use; and d) disciplinary theory in which critical study of practice and its principles in the light of fundamental theory and research.
- The four courses studied all showed in varying ways moves towards the training of reflective practitioners rather than of those seeking to apply theory.
- While in the notion of practices as the 'application of theory' created a psychological gap between theory and practice which no amount of practice could bridge, the gap was not experienced in this project because theoretical aspects at levels b, c, and d were given professional relevance at level a.
- School-based trained teachers were generally rated by school heads as better than those from other routes (p.202-204).

In 1989 the Licensed Teachers Scheme was piloted in England and Wales whose essence was that it was individually tailored, and employment-based, not course-based (Arora, 2005). It was an apprenticeship initiative "placing students entirely in the hands of schools alone" (p.107). However, it was established that "more than half of the licensed teachers were qualified as teachers overseas and many of others had had some teaching experience" (p.107).

While the Licensed Teachers Scheme was entirely school-based, a similar scheme, the Articled Teachers Scheme, was run in partnership between training institutions with local education authorities which was first implemented as a pilot in 1990 (Arora, 2005). Student teachers would enrol in a two-year PGCE programme at a training institution "but they would be trained as far as possible in schools, and would be paid" (p.109). It is important to note that these reforms were not always well accepted. LEAs and teacher unions were reported to have been cautious - seeing the moves as a loophole for authorities to employ the "cheaper earn-as-you-learn than the trained teachers", "a quick-fit strategy (and) "a fast low cost solution" to teacher shortages as well as "a dilution of standards in a rush to get more teachers" (p.109).

In America, teacher training followed a similar trend from teacher training in normal schools, to teacher training colleges to university faculties and then to professional development schools and licensure programmes (Levine, 1998). It has been noted that the use of university faculties for teacher training brought about competition for resources that led to education faculties usually emerging the losers. But that was not all, the gap between teacher training and the school widened as 'the experts' were

increasingly being prepared in isolation, to the dissatisfaction of the public, the employers, parents and students. Also, it has been noted that due to problems within the faculties of education, teacher production could not suffice the demand for teachers in terms of numbers and quality. The emergence of the professional development schools and alternative licensure programmes were a reaction to the teacher quality and supply issues (Smith, 2009).

As noted earlier, there are competing discourses on teacher training and development ranging from university–based theory-into-practice to craft apprenticeship based in schools. Adoption of university–school partnership is increasingly becoming a more compelling venture as theory and practice are integrated in the form of collaboration. However this understanding is in principle a middle position of the extremes – the 'Theory into Practice' and the 'Craft Apprenticeship' models.

3.3.1 Theory into practice

This is what is called "the sacred theory-practice story" (Clandinin, 1995) or "theory first, practice later" (Freese, 2006) approach to teacher preparation. Teacher education is conceived as the translation of theory on good teaching into practice. For decades it has been believed that teachers ought to receive their initial training within an institution of education. That was considered to be a minimum requirement for anyone aspiring to enter the profession. The courses provided have generally been for developing the student teacher's specialist subjects, both in terms of knowledge content and the application of the subject knowledge within the school. The other element is inducting the student teacher into the role of being a teacher and development of their professional understanding and skills. While it is generally acknowledged that subject knowledge can only be adequately taught in institutes of education like universities, subject application and the professional element of training has remained at the centre of the argument.

The theory into practice model locates both subject-related knowledge and professional elements of training within the provision and central to teacher education institutions. To be a teacher is a matter of learning the established educational theory that is then applied to practice. Hence the competent teacher is the one who is able to respond to situations in school or classroom by applying appropriate theory that has previously been learnt in teacher education institutions. In this model theory and practice are separated as theory perceived to come prior to practice, both as it precedes practice and that it takes precedence over practice.

In the 'Scripted Lessons' project (Dickinson *et al.*, 2004) at the Institute of Education, Manchester Metropolitan University, model lessons on teaching mathematics were prepared by faculty and well rehearsed by student teachers before actual classroom teaching. Student teachers then took the lessons into schools before returning to university to discuss their experiences. In this project clearly the student teachers took theory into practice with little or no adjustment to the realities of the school and classroom. A one-sided online debate on the use of scripted lessons in American schools (Education Week, 2007) brought together over 30 education experts and practitioners. A very consistent observation was that scripted lesson programmes were depriving teachers of creativity because they provided 'canned' curriculum that left little room for teachers to establish passionate learning contexts.

The argument against this tendency is that the theory into practice teacher education programmes are said to fail in preparing prospective teachers for the realities of the classroom (Goodlad, 1990). Many studies have shown that the transfer of theory to practice is meagre or even non-existent. For example, in their article, *Are the effects of university teacher education washed out by school experiences* Zeichner and Tabachnik (1981), showed that many notions and educational conceptions developed during preservice teacher education, were actually "washed out" during field experiences. Comparable findings were reported by others (Veenman, 1984, Lortie, 1975, Cole and Knowles, 1993).

3.3.2 Craft apprenticeship

Like theory into practice, craft apprenticeship separates theory and practice but prioritises practice. The influence of the apprenticeship theories is evident. The argument is that teaching is a craft that needs to be learnt by doing. The presence of a master craftsman or woman, in this case the experienced teacher in school is vital (Brown and McIntyre, 1993). Student teachers need to learn through gaining access to the craft knowledge, a knowledge that is only acquired through experience (Lortie, 1975). Acquiring pedagogical skills for Van Manen (1995) is difficult without experience because practical knowledge becomes real in the very act of teaching.

Teaching in this model is considered to be a practical activity, a craft to be leant, and can only be learnt within a context of schools. The key word is 'learning on the job'. The student teacher is viewed as an apprentice progressively learning the skills of teaching through observation and trial and error (Lawlor, 1990, p.8). Practice, therefore, not theory, improves practice. In this model the initial capital of the student teacher is mastery of specialist subjects. The rest will be picked up in the course of practice: the ability to teach, to monitor pupils' learning and to manage classroom. Unlike the former model

which locates teacher education in the training institution, craft apprenticeship is school-based. The British school-based model is the ring leader of this model. Schools are given a leading responsibility for training and the role of the training institution is reduced to ensuring that courses meet the requirement of academic validation, presenting courses for accreditation, awarding qualifications to successful students and arranging students' placements in more than one school.

3.3.3 Interactive theory and practice

The interactive theory and practice model agrees with the previous model that education is a practical activity and that teacher education must therefore address the practical situation that student teachers meet when they enter schools. In this model, theory is integral to practice, is generated from practice to be applied back to practice, in constant dialectical interaction. The relationship between theory and practice, the theorist and the practitioner, is redefined, and the role that higher education institutions and schools play in the process is reassessed. Practice takes priority and theory is considered relevant only insofar as it illuminates practice and opens up possibilities for improving practice. The traditional separation of responsibilities between teacher educators in college or university and teachers in schools no longer holds - especially insofar as the former have been thought to be the theorists and the latter the practitioners (Sankey, 1996). The Model Classrooms Project (Grisham and Brink, 2000) considers how observation of and interaction with exemplary literacy teachers in "Model Classrooms" visits might affect preservice teachers' knowledge of practice; and suggests that engaging preservice teachers in a variety of activities with real teachers and children throughout their training enhances the experience of the student teacher and has the potential to positively impact the practice of inservice teachers as well. The model classrooms project was designed to be in stages: observation, discussions, teaching and reflection. Student teachers are involved in observing excelling and experienced classroom teachers teach; ask questions about the lesson and other lesson issues such as classroom management and assessment; and then prepare and teach, and reflect on their practice. The interactive theory and practice model is what is referred to as constructivist approach to teacher education (Carlson, 1999), in which grounded theories are developed individually or in small groups based on information gathered from the world of practice; compared and contrasted with already published theories and research; and then integrated with personal philosophies and values.

Teaching is seen in terms other than craft, most likely as a professional artistry (Fish, 1995); and the craft-like aspects of teaching present within teaching, are not the most important issues in learning how to teach. Usually, as Schon (1983) puts it, problems of greatest human concern are incapable of

technical solution. Learning to teach is concerned with developing the ability to interpret situations wisely (Elliott, 1993). Emphasis in this model is put on processes such as reflection, mentoring, collaboration, and action research.

3.3.3.1 Reflection

Much that has been written and read on reflection is associated with Donald Schon. As described by Schon (1987), reflection involves thinking (intuitively, rationally and strategically) on classroom teaching and school curriculum in general. School-based teacher education involves partners meeting on a regular basis to talk about the teaching job, and reflect upon actions, ideas and convictions. In this context, the competent student teacher is one who is continuously able to reflect, articulate and formulate reasoned solutions to the problems and challenges confronting him or her in the classroom and school.

Schon (1983) took up reflection and argued that reflection was going on during action (reflection-in-action) and after action (reflection-on-action) all of which led to learning by reflecting, not only by doing. In the context of teacher training, reflection-on-action enables the student teacher to create a database of cases which are used to understand new situations (Elliott, 1991). Schon called it "practical wisdom" stored in the mind. The reflection theory has been debated, supported and criticized by many writers but its underlying principle on learning by reflection has grown stronger. Schon wrote:

> *Competent practitioners usually know more than they can say. They exhibit a kind of knowing in practice most which is tacit. Indeed practitioners themselves use this capacity to cope with the unique, uncertain, and conflicting situations of practice (p.8-9).*

The reflection theory has been criticised as lacking evidence that reflection-in-action does actually take place; and its conflicting ideas regarding reflection-in-action and use of tacit knowledge (Eraut, 1994). Eraut brought forward the metaphor of riding a bicycle as he argued that "like riding a bicycle you don't have to think how you do it" (Eraut, 2008, p.4). He used Polanyi's (1967) concept of tacit knowledge to explain what happens when such skill is being learned. Polanyi's thinking was the belief that creative acts (especially acts of discovery) are shot-through or charged with strong personal feelings and commitments. Arguing against the then dominant position that science was somehow value-free, Polanyi (1967) wrote "we should start from the fact that we can know more than we can tell' (p.4). He termed this pre-logical phase of knowing as 'tacit knowledge'. Tacit knowledge comprises a range of conceptual and sensory information and images that can be brought to bear in an attempt to make sense of something.

Otherwise the basic idea of reflection dominates Eraut's writings. He basically agrees that "learning takes place during knowledge use" and success (in learning) depends on social relations and institutional micropolitics (Eraut 1994). The importance of experience and dialogue was thus advanced. For Eraut teaching is too complex and unpredictable an activity for the replication of blueprint or application of a simple set of principles to provide a sufficient foundation for good practice. He specifically refuted the ideas of theory into practice theorists as he put: "replication of theories may have been encouraged in college examinations but in practical contexts theoretical knowledge has to be adapted to suit the particular demands of each situation. This requires more than simple application of theory (because) theories have to be interpreted in order to be used" (p.27).

Eraut (1994) summarizes his theory that learning associated with any change in practice takes place in the context of use and should not be conceived as acquired first and then used, because between encounter of the knowledge and use, there is usually a process within – a process of contemplation. Equally important, there is little immediate transfer of learning from one context to another. In order for an idea to be used in another context, there must be considerable further learning, providing as an example that ability to write essays about teaching, does not transfer into classroom teaching. Eraut has applied his ideas in a variety of work contexts across professions and has found out that placements (like in school) provide contexts for learning of a very different kind from those provided within the universities because "not only do people learn different ways, but they also learn different things" (Eraut, 2008, p.1) and that tacit knowledge develops when people engage in work context particularly if the work involves interaction with people – colleagues, clients, customers – because tacit knowledge is in use.

The Kolb's circle of experiential learning, has been argued, could be one way of capturing the tacit knowledge which otherwise remains inexplicit. According to Kolb (1984, p.38), "Learning is the process whereby knowledge is created through the transformation of experience". Kolb's Experiential Learning Theory presents a way of structuring and sequencing the curriculum and indicates, in particular, how a session or entire course may be taught to improve student learning. It suggests that learning is cyclical, involving four stages, which, paraphrasing Kolb may be referred to as experience, reflect, generalize, and test. An important feature of the theory is that the different stages are associated with distinct learning styles. Individuals differ in their preferred learning styles, and recognising this is the first stage in raising students' awareness of alternative approaches and helping them to be more flexible in meeting the varied demands of learning situations (Gibbs, 1988). Teachers also need to recognize their

own individual learning styles as a basis for the development of effective teaching and learning strategies. Learning may suffer where a marked mismatch occurs between the style of the learner and the approach of the teacher (Fielding, 1994).

The core of Kolb's four-stage model is a simple description of a learning cycle that shows how experience is translated through reflection into concepts, which in turn are used as guides for active experimentation and the choice of new experiences. Kolb refers to these four stages as concrete experience, reflective observation, abstract conceptualization, and active experimentation. They follow each other in a cycle. The cycle may be entered at any point, but the stages should be followed in sequence. The learning cycle therefore provides feedback, which is the basis for new action and evaluation of the consequences of that action. Learners should go through the cycle several times, so it may best be thought of as a spiral of cycle.

In experiential learning students are first immersed in action and then are asked to reflect on their experience. Thus, experiential education places major importance on the knowledge of learners derived from a good deal of experiential learning (practice-to-theory approach) (Dewey, 1933, Eraut, 1994**)**. Experiential education is defined as the process of actively engaging students in an experience that will have real consequences. Tyler (1949) maintained that learning occurs "through the active behavior of the student; it is what he does that he learns, not what the teacher does" (Tyler, 1949, p.63). Students make discoveries and experiment with knowledge themselves instead of exclusively hearing or reading about the experiences of others (Kolb and Lewis, 1986). Students also reflect on their experiences, thus developing new skills, new attitudes, and new theories or ways of thinking, particularly by testing and refining that knowledge in socio-constructivist interaction with each other and with mentors who accompany them in their learning (Kraft and Sakofs, 1988).

3.3.3.2 Mentoring

Another key element in the interactive-theory-and-practice set of teacher education theories is mentoring. It has been observed that the worlds of education and work are moving closer to each other and that the integration of formal and informal learning is an essential prerequisite for developing the kinds of expertise needed in response to the changes taking place in working life (Tynj¨al¨a, 2008). One strategy for bridging the two worlds is mentoring. Mentoring, at its basic level, is a structured, sustained relationship for supporting professional learners at the early stage of their career, through a career transition or when facing a particular challenge. For example, newly qualified teachers, supply and

returning teachers or recently appointed head teachers can benefit from a mentor. The mentor is normally a more experienced colleague with knowledge of the needs and professional context of the other person. The process is usually time defined and has a significant emphasis on developing the less experienced colleague's instructional skills and classroom practice. Mentoring is most effective when mentors are selected for their knowledge and expertise and given training in mentoring skills, adult learning, and the ability to identify and communicate best practices (Ingersoll, 2004).

A mentor is described as someone who "helps you to step outside of the box of your job and personal circumstances and look in it together" (Dymoke and Harrison, 2008, p.3-4); someone who plays various roles that together contribute to mentee's learning: a teacher, coach, supporter, enabler, role model, or critical friend. The mentor should be able to offer "empathy and non-judgemental critique, to challenge behaviour not the person, to challenge assumption not the intellect, challenge perceptions not judgement and challenge values not value" (p.3).

Mentoring has shadowed much of literature on teacher education mostly being positively associated with teacher learning, both student and probationer teachers. However, it has been observed that by its popularity, mentoring can become a mantra to education (Sundli, 2007) that is, a concept presenting itself as unquestionable, but whose danger could turn out to be an obstacle to reflective professional teaching rather than an enhancement. Issues under concern are power relations between the mentor and mentee, competition and not cooperation between groups of mentees, and vague and contrasting goals in mentoring plans. It has been noted that the mentors by design are not influential among mentees indicating that mentoring works when it is within the mentees' choices (Tellez, 1992).

The notion of choice leads to an understanding that while mentoring could bring about a framework within which senior and novice teachers could work together, theoretically, the actual choices of relationships should be made flexible. Eraut (2008) observes that knowledge of people is tacit such that it cannot be put in words (and) one "struggles to put into words that one knows about people" (p.9). In the context of school teachers have their own knowledge about others whom they would like to associate with or seek support from, although they cannot precisely explain why. In a partnership framework, universities, schools and other organisations and individuals to be affected by a teacher training programme would require developing some mentor training programmes and school teachers would work as school mentors.

There are distinctions according to relationships in the mentoring process. For example Ingersoll (2004) identifies peer coaching as a relationship between two or more professional learners which enables them to share concerns and experiences and embed new knowledge or skills in their practice. Frequently, those involved have similar professional interests and find the relationship to be of mutual benefit. The relationship may take the form of a network, perhaps evolving from another professional development experience. The process may be short term or long term and may be appropriate for colleagues who are teaching the same stage, are in the same department, have recently taken up new posts or are preparing for further promotion.

Mentoring is further distinguished from specialist coaching in that the latter is a more structured and sustained relationship to help develop a particular aspect of the professional learner's practice. It enables professional learners to review and define existing practice, to develop and extend skills and to explore and introduce alternative strategies. It is of benefit to practitioners at any stage of their career. The specialist coach is normally a professional who has particular expertise as a coach but does not need specific subject knowledge, as the process focuses on the agenda of the person being coached. Coaches require training in effective coaching skills, and in many cases may have gained accreditation. Common elements of all mentoring and coaching relationships include:

- a learning conversation
- reflection and sharing
- agreed outcomes
- focus on learning and teaching
- mutual benefit
- confidentiality (Ingersoll and Smith, 2004).

A distinction is made between face-to-face mentoring and online mentoring (Brady and Schuck, 2005). Brady and Schuck contend that online mentoring may be a supplement to conventional face-to-face mentoring, however they acknowledge that it is not a substitute. Their research revealed that the two expressions of mentoring have different purposes. Face-to-face mentoring has the advantage of being personal, by providing the human touch and by being situated. The argument that a mentor within the school understands both the distinctive culture of that school, and the needs of the students, is irrefutable. Online mentoring, however, has the advantage of presenting 'a bigger picture'. While school-based advice is invaluable for the mentee in solving a classroom problem, because it is situated, it might also be limited simply because it is context-bound. A telling example is that of the beginning teacher who, having consulted with her mentor about problems with students, proceeded to ask the same questions in the online forum, and was delighted by the answers she received. Such an action is

not an implied criticism of her mentor. It is the expression of a desire to consider a variety of possible solutions.

Some studies on mentoring have gone further to distinguish between school-based mentoring and system-wide mentoring (Hastings, 2007). Hastings (2007) looked at the differences between the two types of programmes and evaluated their effectiveness. The study also looked at how the two different types of mentoring programmes affect new teacher retention rates. The results of the study showed that system-wide mentors were more effective and helpful to the beginning teachers. However, the results did not prove that system-wide mentoring programmes increase the average retention rate.

The programme evaluated by Hastings (2007) changed from having school-based mentors to having several system-wide mentors who worked fulltime at assisting the beginning teachers through their first year(s) of teaching. The reasons for changing the induction programme were that research had shown that teachers are more comfortable with mentors that are not in their school and that too many beginning teachers had complained that the school mentors had become a “snitch”. System-wide mentors therefore answer to the professional development department, not the school head which allows for teachers to feel more comfortable going to their mentors about issues. The mentors are there to support their mentees rather than evaluate them.

The concept of system-wide mentoring has been presented rather differently elsewhere (Bemis, 1999, Smithey and Evertson, 2003). Bemis used it to refer to whole-school mentoring as opposed to departmental mentoring. She found that mentoring programmes were most influential on new teacher retention for elementary level teachers. When mentoring programmes were implemented on a department basis rather than as a system wide programme, the positive effect on new teacher retention decreased. When system-wide mentoring programmes were in place, new teachers were more likely to rate job satisfaction and perceived community support as high. Smithey and Evertson (2003) also used school system-wide to refer to whole-school mentoring and were in favour of the (school) system-wide mentoring.

Theories on mentoring and related practices have tended to emphasise the role of the mentee as an active participant in the process. Roberts and Graham (2008) refer to this notion as ‘student self-directed development’ and they emphasise the need for student teachers to develop proactive social skills. A similar kind of emphasis is expressed by Harrison *et al* (2006) who argue for ‘developmental mentoring’ a move that involves elements of challenge and risk-taking within supportive school

environments with clear induction systems in place and strong school ethos in relation to professional development.

Quality mentoring and other induction programmes have many benefits, and teacher retention is most important (Hastings, 2007). Investing in high intensity induction and mentoring programmes bring improved retention rates, increases in instructional skills, and increases in student achievement. Ingersoll and Smith (2004) found that the retention rate for teachers participating in an induction programme nationwide was 88.1%, while the retention rate of those teachers who did not participate in some type of induction programme was 82.4% (Ingersoll and Smith, 2003). The study by Ingersoll and Smith not only looked at the fact that there was an induction programme, but also at what type of induction programme there was. In the study, they found that the more intensive the programme, the less likely teachers were to leave the profession.

3.3.3.3 Action research

The key terminology in the recent teacher preparation discourse is 'practical knowledge' (Darling-Hammond, 2008, Cochran-Smith and Lytle, 1999). Cochran-Smith and Lytle (1999) distinguish among three different conceptions of knowledge associated with teachers' learning and change: knowledge for practice, knowledge of practice and knowledge in practice. While the first category of knowledge includes formal knowledge theory generated by researchers and university-based scholars, the other two have something to do with practice in school. When teachers treat their own classrooms as sites of inquiry and examine results in terms of social and political issues such as equity and student achievements, they are generating knowledge of practice. At a very basic level teachers can reflect on their own practice and that would be referred to as knowledge in practice. However a distinction is made between knowledge in practice and tacit knowledge because the former is a product of a deliberate inquiry.

School-based teacher education is about turning school into a research venue and bridging the gap between university and school and between theory and practice. Various model lessons are designed and tried out by student teachers and teachers at the school and later on presented and discussed among other partners. As such, partners inspire and motivate each other and grow into a community of practice i.e. a group of professionals who are mutually engaged in educating student teachers. They share a common language, actions and tools of inquiry.

3.3.3.4 Collaborative partnership

School-based teacher education requires shared responsibilities between universities and schools. This would require working out roles to be performed by each partner. Teacher education "is located in neither the university nor the school but in the collaborative work of the two" (Cochran-Smith and Lytle, 1993, p.284). Bringing in the role of school communities transforms teaching and learning as it fosters "both learning new knowledge, questions and practices, and at the same time, unlearning some long-held ideas, beliefs and practices, which are often difficult to uproot" (Cochran-Smith, 2003, p.9).

3.4 *Support for student teachers in a distance learning programme*

The teacher's role includes a range of different activities which need to be addressed by the teacher education programme. Teacher education is meant to enable teachers to develop the potential of pupils; to serve as role models to pupils; to help transform education and the society; and encourage self-confidence and creativity. In a more categorised way, teacher education needs to address four interrelated areas of teacher development: i) improving the general educational background of the teacher ii) increase knowledge and skills of the subjects to teach iii) pedagogy and understanding of children and learning, and iv) development of practical skills and competences (Perraton *et al*, 2002).

Subject knowledge refers to knowledge of the discipline, its key questions, ideas and debates, for example in design and technology the practices of technologists in different fields. It seems obvious that this would be important for secondary school teaching, where the curriculum is based on subjects and where subject knowledge is deemed to be what pupils learn. Various researchers support this view (Buchmann, 1984, McNamara, 1991, Aubrey, 1997) and that the more or better subject knowledge a teacher has 'the more effective one can be as a teacher' (Ball, 1991, p.3). A study in the UK (Hobson and Malderez, 2005) found that 78% of student teachers on a one-year PGCE programme thought it important to gain knowledge about teaching their subject, despite the fact that the PGCE students had already spent three to four years studying for a degree in their subject discipline!

Pedagogical knowledge refers to how the subject is presented to pupils, the illustrations, explanations and analogies used to help them understand the concepts and knowledge. Knowing how to teach a subject is what distinguishes teachers from other subject specialists (Murphy, 2006). Murphy believed that teachers 'need to know and understand the subject in a different way to the subject specialist' (p.229). Pedagogical knowledge has been described as 'teacher pedagogical constructions' (Hashweh,

2005) and that the pedagogical constructions are a collection of 'attributes' that the teacher draws upon to help her/him share the subject knowledge with the pupils.

School knowledge is the way in which the subject discipline is represented in schools (Owen-Jackson, 2008). The requirements of the curriculum or examination often focus or shape the teaching of a subject, or the requirements of a particular school can impact on what is taught, or how it is taught, this requires subject knowledge to be adapted to fit the school. Different schools may also vary in what and how they teach, and this too influences school knowledge. These three aspects of professional knowledge have been simplified by Banks *et.al*. (2000) as:

- knowing their subject;
- knowing how to teach their subject; and
- knowing how to teach their subject in their school.

School-based support includes a variety of structures, activities, and processes within the school and between the school and the training institution. Literature on school-based support tends to concentrate on activities involved in such processes as peer interaction, mentoring and cooperating teachers. Freeman (Freeman, 1997) views learner support in four different facets: support from tutors, peer and group support, support from mentors, and support from materials. A list of possible supporters in a DL mode could be long: adviser or counsellor, tutor, mentor, line manager, technicians or workshop demonstrators, librarians, learning centre receptionists, other learners, and friends and colleagues (Rowntree, 1992).

Some other scholars have shifted attention to the use of modern technology as a possible potential for enhancing school-based support. They include web based mentoring systems (Neville, 2002) which can promote student support by using email, bulletin boards, or chat rooms, where learners can communicate with fellow students, with teachers, or their institutions; likewise teachers can provide feedback and advice through email. Another recent innovation is mobile learning (Fozdar, 2007), which requires connectivity to the telephone network. A web based mentoring system and mobile learning however would require more infrastructural arrangements if they are to be used for teaching purposes as opposed to communication purposes; and thus may not be appropriate for most schools and even universities.

The case of OU (UK) (Table 3-1) demonstrates student support in the school-based model. It has been shown that the student support involves mentors and school coordinators who are assisted by PGCE

tutors and other regional academic staff. The support extends further to include written guidelines for school experience as well as electronic interactions among students and between students and tutors.

Table 3—1 Open University (UK) PGCE approach to school-based teacher education

School level*: The mentor* plays a key role, with responsibility for support and training as well as assessment of the students. In addition, *School co-ordinator,* a senior member of staff nominated to support both, mentor and student, acts as a management link to the University, ensuring the student can experience school-wide activities as well as validating school-based assessments of the student's progress. For consistency and guidance every partner school receives a "*School Experience Guide*". The guide includes mentor training materials, and variety of activities that students are required to engage in such as classroom observation, collaborative teaching, and co-analysis of practice.

Regional office: Regional offices are responsible for the day-to-day administration of PGCE. *Academic staff* located in regional offices across England, Wales and Northern Ireland, are responsible for appointing and training local part-time OU tutors for the course. They have direct face-to-face contact with schools and students: they do sample monitoring the interviews of students by schools; briefing mentors; supporting partner schools and moderating the assessment of school experience. Specifically, *the PGCE tutors who* are also experienced teachers provide readily accessible personal support for individual students throughout the course, as well as through regular group tutorials and day schools. *Electronic communication* is used to facilitate student interaction among themselves and between them and their tutors (Leach, 1996; Tait, 2000).

3.5 *Other forms of support for student teachers*

Paired placements and peer assessment of beginning and student teachers (Divaharan and Atputhasamy, 2002, Nokes *et al.*, 2008) present another area of focus as far as student support is concerned. The pairs were reported to have found a rich learning experience because of tensions, dialogue, and reflections. Peer-videoing in the classroom is a tool that has been proposed for promoting reflective practice among student teachers. The practice of encouraging student teachers working in the same school to participate in structured video analysis avoids the impact of external observers whose role is largely evaluative and endorses a collaborative model that promotes dialogue and shared learning (Harford and MacRuairc, 2008). This practice promotes a culture of observation and critical dialogue in a profession which has traditionally been characterised by isolation, while at the same time fostering and validating the voice and experience of the student teacher.

There is some literature generated for understanding the role of supervised teaching practice in supporting learning how to teach (Borko and Mayfield, 1995, Christensen, 1988). However much of this literature points to the fact that university tutors and their cooperating tutors in schools play a limited role in the process of learning to teach (Borko and Mayfield, 1995). Supervised teaching practice is defined as an agreement a teacher education institution enters with a school for the latter to allow student teachers from the former to practice classroom teaching for a couple of weeks in an academic year (Down, 1995).

Borko and Mayfield (1995) examined "guided teaching" relationships between student teachers and their university supervisors and cooperating teachers, and the influence of these relationships on learning to teach. They observed that the cooperating teachers and university supervisors in the study played limited roles in the process of learning to teach. Exceptions were a small number of cooperating teachers who believed that they could and should play an active role in student teachers' learning, conducted longer and more frequent conferences with their student teachers, and provided more extensive feedback. Based on these findings, they suggested changes in the roles of the university supervisor and cooperating teacher designed to maximize the likelihood that student teaching would lead helping student teachers explore new ways of teaching.

A study by Atputhasamy (2005) was designed so as to provide an answer for the question, "How do student teachers' expectations compare with the actual help received from the cooperating teachers during TP? An open-ended survey was administered to a sample of 72 student teachers. The student teachers were asked to write down areas in which they would like to get help from CTs when they go out for TP in schools. Following that, 20 most mentioned areas were used to design a questionnaire for rating, for which 107 student teachers filled, before and after TP. T-test analysis revealed that there was a significant difference between expected and actual support provided by CTs in all 20 areas. The researcher concluded that the CTs were incompetent in meeting student teachers' expectations and went on further to recommend that the choice of CTs should be more selective of only those who have expertise and experience.

In summary, literature identifies areas of weakness as far as use of TP model is concerned:

- lack of preparation for diverse situations;
- lack of linkages between subject matter and teaching processes;
- difficulties in placement of student teachers;
- uneven use of schools for TP experiences;
- lack of direction of student teachers;

- lack of positive teacher models;
- confrontation in supervision situations;
- lack of consistent supervision;
- lack of training of cooperating teachers;
- lack of credibility of college or university supervisor;
- unclear expectations in the supervision situation;
- lack of 'ownership' of TP programme;
- lack of communication between institutions (Queensland Board of Teacher Registration, 1994, p.6).

3.6 *Conclusion*

Chapter Three has presented literature on student support specifically for student teachers. Much of the literature has pointed to the need for teacher education programmes to consider adopting school-based support strategies that do not only prove to be more effective in supporting student teachers to learn how to teach but also in ensuring better student retention. As presented in this chapter, there appears to be a need for many educational systems to adopt DL as a model for teacher education for mass production of teachers. This economic phenomenon does not necessarily imply improved quality of teacher education, especially if student support structures in the DL institution are still university-based (Moon, 1996, Dladla and Moon, 2002). There are some basic underlying philosophical principles that make it necessary for teacher education to move from university-based structures to school-based. Ideas such as practical knowledge and reflection (Eraut, 1994; Cochran-Smith, 2000) are elaborated further in terms of specific student support strategies such as mentoring (Roberts and Graham, 2008; Sundli, 2007; Tellez, 1992), peer interaction and general staff collegiality in a situated community of learning environment (Abdallah, 2009). In the next chapter a review of literature on distance learning and student retention is presented in order to have a more holistic understanding of ideas surrounding student support in a distance learning mode.

Chapter Four: Literature on Distance Learning and Student Retention

Distance learning can be a soulless and isolated activity so that dropping out is more attractive than going on (Perraton *et al.*, 2002, p.12)

4.1 *Overview of the chapter*

This chapter argues that distance learning theories do not necessarily address the issue of student support and retention particularly in the context of teacher education, by their insistence on student autonomy. The argument of the thesis is that any support rendered to DL student teachers needs to accept the fact that the student teachers function in a community of, among others, fellow students, and colleagues and senior teachers in departments and in school as a whole. The chapter however appreciates a move by some recent DL theories that point to the need for collaboration among DL students, although not directly related to school-based distance learners. More importantly, the chapter moves further to point to literature that provides various possible strategies DL programme designers could adopt in order to ensure student retention is maximised. Such strategies include use of study centres for tutorials and student interactions, face-to-face meetings, flexible and blended learning and use of mobile learning and mobile support.

4.2 *Distance learning and related concepts*

Distance learning has been elaborated by UNESCO as "approaches to learning that focus on freeing learners from constraints of time and place while offering flexible learning opportunities" as a way of combining work and family responsibilities with educational opportunities. DL is further elaborated as "any educational process in which all or most of the teaching is conducted by someone geographically removed from the learner, with all or most of the communication between teachers and learners being conducted through electronic or print mediums" (UNESCO, 2003, p.(n.p)).

The most basic feature is that learners and teachers are physically separated (thus sometimes called learning/teaching at a distance). This calls for the use of media through which learners and teachers communicate. Various media are utilized from print, which was dominant in the past (thus sometimes called "correspondence study"), to the internet, which is prevailing in recently founded distance learning institutions. Some of the institutions offering DL use the name of "open university" or "virtual university".

DL has evolved over time to mean something rather different from the original meaning, to the extent that some scholars in the field have proposed rethinking the use of the term 'distance learning' or

"distance education". Dladla and Moon (2002), for instance have suggested that unless a DL programme is a traditional correspondence phase, the use of "distance education" is a misnomer. Questions such as "*Does place still matter?"* (Tait, 2002, p.3) depict rethinking the relevance of geographical distance during advanced instructional technology.

The history of DL (Taylor, 2007) shows that DL operations have evolved through the following different generations:

- First generation: the Correspondence Model based on print technology;
- Second generation: the Multi-media Model based on print, audio and video technologies;
- Third generation: the Tele-learning Model, based on applications of telecommunications technologies to provide opportunities for synchronous communication;
- Fourth generation: the Flexible Learning Model based on online delivery via the Internet.
- Fifth generation: 'Intelligent Flexible Learning' model, that incorporates the use of automated response systems and intelligent object databases in the context of Internet-based delivery, and which has the potential to provide students with a valuable, personalized pedagogical experience at noticeably lower cost than traditional approaches to DL and conventional face-to-face education.

The more advanced the DL approach adopted, according to Taylor's evolution of DL, the more technology-based is the DL programme.

4.3 *Forms of distance learning for teacher education*

Teacher education through DL has taken different forms over period of time. The basic form has been the traditional correspondence programmes for teachers. This form includes the teacher training programme of primary school teachers in Tanzania (Chale, 1993) and Zimbabwe (Chivore, 1993). Dladla and Moon (2002) regard the use of this version of DL for teacher education as not only being inadequate but also a great impediment to current initiatives that strive to implement school-based teacher education. They assert that

> *(T)here is the erroneous perception that school-based teacher education can be equated with old style distance education (the correspondence courses that provided a cheap means of training across much of the region, and in some respects still do). Supported school-based training using state-of-the-art technologies bears no relation to that old, much-discredited model. And if support is provided, as we argue it should be, the term distance education becomes something of a misnomer (p. 4).*

As will be discussed later, Moon is one of the most pioneering writers on transforming teacher education in Sub-Saharan Africa through the use of DL. However, his ideas are consistently focused on

use of ICT in a school-based approach. It all remains an ideal situation so far, given the practical realities in a typical African school (Unwin, 2005, Traxler and Leach, 2006).

> *The physical infrastructure (in Africa) is characterized by: sparsity, vast distances and low densities of population; schools, especially rural schools, in substandard buildings or none at all; poor roads, transport systems and postal services; poor landline phone networks, unreliable and often unprofitable; poor mains electricity, unreliable and concentrated in towns and cities; little or no Internet bandwidth outside major cities, often just internet cafes or hotel business centres in cities; very few modern PCs or peripherals in the public sectors, and little user expertise, especially in smaller towns and rural areas (Traxler and Leach, 2006, n.p.)*

Another form of teacher education programmes through DL has used the concept of open learning. Open learning has been defined as both a philosophy and form of study (Boot and Hodgson, 1987). It is a philosophy of education which values more opportunity for learners to engage in various ways with the educational process, not just through face-to-face interaction. At the same time, it is defined as a form of study which students may enter without prior qualifications, where the student has the greatest flexibility in choice of: topics of study; period of studies; place and time of study; and modes of assessment.

Open learning as an approach to teaching and learning emphasises the student's right to make decisions, and views the teacher as facilitator of learning rather than as transmitter of knowledge (Pearson and Ford, 1997). However, the notion of open learning has been mainly related to use of technology, particularly open source materials. Recent open learning programmes in Africa include the Teacher Education in Sub-Saharan Africa (TESSA) mainly for developing materials for improving teaching standards of teachers (Anamuah-Mensah *et al.*, 2009, Moon, 2008). Another such initiative is the Digital Education Enhancement Project (DEEP) whose main purpose is to research the development and implementation of ICT enhanced and transforming strategies for teaching and learning in numeracy, science and literacy in the 9-13 age range (Leach *et al.*, 2002). The open learning form of DL when argued to be the only way out of the teacher education crisis in Africa appears a too ambitious goal. In addition to limited access to ICTs in most areas of Africa, it appears that there are some more socio-technological issues that make the whole proposal for use of technologies unattainable. Computer and the internet even where they are available are not fully used in teacher training colleges (Unwin, 2005). Switching from traditional paper-based to online materials is not that automatic to many learners to whom study using paper-based materials is itself an innovation (Pityana, 2004).

Another form of teacher education through DL is school-based teacher education (Moon, 1998, 2001, 2008). In this form, particularly in the works of Moon and his associates, it appears that DL for teacher education is synonymous with SBTE. According to Dladla and Moon (2002) in order for DL to qualify as an SBTE it should be transformed from the cheap traditional correspondence form into "Supported school-based training using state-of-the-art technologies" (p.5). Increased emphasis on school-based teacher education (SBTE) is highly influenced by the reflective practitioner movement which emphasizes practice and self-evaluation (Schon, 1987). In the context of developing countries, however, SBTE has been proposed as a matter of logistical necessity where it is impossible to take millions of teachers away from their classes to attend a teacher training course in traditional institutions (Dladla and Moon, 2002). Together the two grounds highlight the need for more collaborative partnerships between teacher education institutions and schools.

4.4 *Why distance learning for teacher education?*

Literature suggests that DL could be the solution to most of Africa's problems regarding teacher professional development. Dladla and Moon (2002) believe that DL could be effective especially when student support systems are established at school or cluster level. This would solve the problem by allowing teachers to undergo training while working. Perraton et al (2002) point to three strong points for use of DL in training teachers in Africa i) that it has already been shown that DL can be as good or even better than conventional modes of delivery, as exhibited by results from students in dual-mode universities; ii) DL has the ability to reach those who could not otherwise get access to education and training; and iii) where DL provides an opportunity for student interaction with tutors, it allows open-ended dialogue. The three reasons together make DL more accessible (than the conventional mode) and teacher education and training should seize this opportunity.

Particularly in Africa, teacher supply in secondary schools has become an issue for attention. While conventional teacher education programmes lack the facilities to produce the required numbers of teachers (Dladla and Moon, 2002), an equally disturbing experience with the conventional residential programmes is the fact that teachers have to be relieved from their work stations to go for studies. Even if the colleges and universities had enough facilities for accommodating the numbers of teacher trainees, such policy option would leave schools with severe teacher shortages, for some as long duration as three or four years of degree level education. In such situations governments have tended to favour DL as a model for teacher education. Many countries are faced with an immediate need to dramatically increase their teacher populations in order to meet teacher demand targets.

It has been argued that DL could be considerably less costly than conventional learning. Historically one of the first important studies was carried out by Wagner in 1976 to analyse the cost of the British Open University compared to those of the conventional universities. The aim was to check whether DL was a viable and cost efficient alternative to face to face teaching. Wagner's calculations (Wagner, 1977) showed that the cost per student is about one third of the other universities, and thus revealed a significant cost advantage to the Open University. However this effect holds only for a high number of enrolled students. In later studies these calculations have been refined by taking into consideration the drop-out ratio, the impact of courses for different subject areas, group size of tutorials and type of media used (Laaser, 2008). Lynd (2005) estimates the cost of distance teacher training to be between one third to two thirds the per-student cost of conventional programmes.

During periods of rapid expansion of the teacher force, many countries simply are unable to afford high per student training costs. In this kind of budget environment, in order to meet educational access goals, more and more schools are being built by governments and communities in rural areas. Yet staffing the schools is often problematic as teachers often prefer to teach in cities, and resist being relocated to areas far from their families, especially remote rural areas. Moreover, many rural people and especially women are unable to leave family obligations to move to a regional centre to receive traditional pre-service training. Thus, to staff these schools, local recruitment and training of teachers who will teach in their own communities is becoming increasingly important. DL provides this possibility by permitting students to stay in their schools and communities while following their course of study. At the same time, it increases retention since teachers being trained in this fashion can remain in rural areas and it helps meet equity goals in the recruitment of women teachers as role models for girls in schools.

Perraton,et al (2002, p. 2-3) summarise that countries use DL for teacher training in four different types given below.

- Some countries use DL to make crowded groups of teachers acquire some basic qualities. This application may be for the ones who have not enough experience or quality.
- When teacher training is seen as insufficient in terms of duration, DL is used in order to enhance teachers' skills, provide them a more complicated understanding, and broaden their information. Some programmes are continued in the form of focusing on a special group.

- DL has a significant role in the reforms of the programmes aimed at changing the content and activities of education such as the programmes directed to support the usage of education technologies at schools.
- DL is used to support teachers' career development. When teachers search the ways of professional promotion, aim to improve their qualities or want to be expert teachers or inspectors; briefly, when teachers need new skills, they benefit from DL.

Given a range of choice of study routes, would prospective students choose DL? A study in Turkey by Askar (2005) of 100 respondents revealed that 65% would never consider doing a course in a DL programme. About 35% stated that they would consider registering at a university for a DL course under certain circumstances: i) if there was no chance to go to a conventional university, for various reasons; ii) if the university is well known, distinguished and services are good; iii) if the university provides face-to-face interaction between the instructor and students from time to time; and iv) if the university provides an interactive internet network. It could be concluded that students, in that context, did not view DL as an alternative to study in conventional universities, but there was a possibility of change of trend in cases where there were no other options, and where well established universities could provide some blended learning.

There is a considerable variance in student attitudes and satisfaction levels between distance and traditional learners (Threlkeld and Brzoska, 1994). The variance is caused by perceived limitation of dialogue between teachers and learners and among learners themselves. Students need dialogue with their teachers and with other students in order to consolidate and check on their own learning. Threlkeld and Brzoska (1994) concluded that there was little empirical evidence to show that DL instruction suffers in comparison to face-to-face instruction, maintaining that "the instructional medium doesn't appear to make any important difference in student achievement, attitude and retention" (p. 42). In other words media was not as important to instruction as other variables, such as learner characteristics, motivation and instructional alternatives. In terms of learning to teach, DL could face a challenge particularly if the design of programmes is within the traditional correspondence model in which case the link between theoretical and practical training of teachers remains the weakest link. Hence student teachers could be denied the "balance of in-school and out-of-school training".

While access to DL seems to be more 'open door', the problem is that of completion. Perraton *et al* (2002) observe that many programmes of teacher education in all continents have succeeded in enrolling students in significant numbers, but what is needed is to go on to ask about completion rates.

The question of student retention in teacher education at a distance is a crucial one. It has been suggested that students are likely to complete their study programmes if they are promised a better status or better pay at the end of their studies. The dichotomy between enrolment and graduation figures could be reduced by addressing teacher education by DL as a national campaign rather than leaving it to individual students.

However, the debate on whether DL is effective in providing higher education is no longer relevant. There are at least two reasons for that: first, the use of ICTs in education has transformed distance teaching and learning to a different kind of teaching and learning mode. The second reason is that the dichotomy between DL and traditional institutions is fast dissolving because traditional institutions have seized the DL opportunity to reach for more students.

Many institutions have incorporated elements of the technologies used with DL into their traditional course offerings to enhance learning and provide greater flexibility of delivery. These blended courses have further blurred the distinction between DL and traditional learning. The institutional motivation for offering distance education courses and programmes varies. A study in the US (Dirr, 1999) researched 1,028 institutions of higher education in fourteen states and found out that the primary motivation was to respond to student demand for distance education (74%). Other factors were: to compete with other institutions that are providing distance education programmes (31%), to enable the institution to market programmes to business and industry (28%), and to reduce the institution's costs for increasing student access (27%). It would appear from the study by Dirr that demand for DL is what drives traditional institutions to turn their programmes into flexible ones.

The issue of flexibility is equally noted in Britain where a study on initial teacher training (ITT) was conducted in order to find out among other things why student teachers choose a certain route for initial teacher training. The most cited response was that students needed a balance of in-school and out-of-school training (Hobson and Malderez, 2005). However one of the most relevant findings is that which showed that only 9% of the respondents indicated that they followed the route because it was the only option for them. In general, student teachers felt they had adequate range of routes for ITT.

4.5 *Distance Learning: the rhetoric*

Distance learning theories seem to capitalize on the need to develop in distance learners a sense of autonomy, a position which could contradict much of learning to teach theorisation presented in Chapter Three. Most of the theories are influenced by the Theory of Andragogy (Knowles, 1970), which

asserts that adult learners perceive themselves as self-directing human beings and define themselves in terms of their personal achievements and experiences. The theories include Theory of Independent Study (Wedemeyer, 1981); Theory of Transactional Distance (Moore, 1973) Holmberg's Theory of Distance Education (Holmberg, 1985), Peters' Theory of Industrialisation of Teaching (Peters, 1983) and even Paulsen's Theory of Cooperative Freedom (Paulsen, 1993). Generally the traditional DL theories insist on developing independence among distance learners.

Wedemeyer's (1973) preference of 'independent study' at the college and university level reflects this notion. Wedemeyer considered the independence of students as the essence of distance education (Keegan, 1986). The independent study theory, is however highly dependent on effective use of technology. The theory then makes sense in contexts where distance learners have access to technology and the assumption is that technology would replace face-to-face interaction between the learner and the tutor and among learners themselves. In the context of DL teacher education this theory does not recognise the existence of DL students who happen to be in groups such as those based in workplaces. An effective DL student could, provided he/she has the necessary gadgets, work independently and thus become a better person. However the plausibility of this analysis may not be applicable in contexts such as schools. It would appear that working independently could have a negative impact on the DL student's personality in a group, particularly as the teaching work realities dictate a collegial way of operating.

At a compromising level, the transactional learning theory by Moore (1973) sought to explain the relationship between the teacher and students in the context of DL. By so doing, Moore's theory advanced an argument that the distance learners are not entirely independent learners because they rely on feedback from distance tutors. In summary the theory is composed of two elements: provision of a two way communication (dialogue) and responding to the needs of individual learners (structure). It is the latter element that determines autonomy of the distance learners. Moore noted that in traditional education institutions students are usually dependent on teachers for guidance. In the context of DL on the other hand, there is a gap between the teacher and students so the students have to accept a responsibility for the conduct of learning. In elaborating this, Moore categorised distance learners as autonomous and non-autonomous depending on the structure of the DL programme. Some DL institutions have structured programmes while others are responsive to the needs and goals of the individual learner. The autonomous learner needs little help from the teacher, who may be more of a respondent than a director. For Moore, autonomous learning is gauged by autonomy of the learner in

setting objectives, methods of study and evaluation. Like the former theory, Moore's theory does not go beyond the student-institution dimension of student teacher's learning to teach and retention.

At another level, Lowe (Lowe, 1997) through his "Situational Academic and Relational Support in Distance Education" (SARSIDE) Model viewed student support as an interplay of many situational, academic and relational factors in shaping the DL student progress; "The most plausible explanation for this phenomenon is the lack of "collective affiliation" …. or integration of the student into the life of the institution". However, Lowe believed that the real support need for DL students was for the training institutions to provide DL study skills and to design and implement programmes that address issues on emotional support, direction, and most importantly, guiding, clarifying, encouraging and monitoring styles of instruction; depending on the nature and level of learners. While the SARSIDE model goes as far as locating the problem i.e., lack of collective affiliation among DL students, its solution to the problem still lays within the institutional way of developing instructional materials that would embrace the student needs. The model, like the others above does not point to the role of peers and colleagues in home and workplaces in influencing the DL students' study progress.

Another theory that can explain the notion of autonomy among distance learners is the Peters' (1973) theory of industrialisation of teaching. Based on economic and industrial theories, Peters proposed that DL was a form of education provision that operated using principles of industrialisation. Peters' analysis led him to conclude that the structure of DL could best be understood from industrial principles such as productivity, division of labour, and mass production. The key issue was automation of teaching and dependence of teaching effectiveness on prior planning and organisation. Peters' theory placed the role of the teacher as a producer of learning experiences and excluded other roles including the teacher-learner dialogue and tuition (Keegan, 1983; 2006). It could be plausible to finally adopt Peters' ideas on using DL for mass production of teachers particularly in those educational systems struggling to keep up with teacher demand. However, what the theory refers to by relying on prior planning and organisation is that DL students have to rely on the already prepared study materials which literally could be distributed to as many students as possible, but ignores continued student support throughout the learning process. Expressed in such terms, DL teacher education programmes risk ignoring the contribution of other factors in learning to teach and progressing in the study programme.

Holmberg's (1995) theory emphasises the role of DL to promote student independence and freedom of choice. He refers to the possibility on the side of students, to have a liberal study and on the side of the work organisations, to have opportunity for professional/occupational training. Regarding liberal study

he notes the risk of education being reduced into reproduction of 'truths' presented in study materials, and that DL has the opportunity to organize programmes in such a way that it encourages students to search, criticise, and identify positions of their own. He insists on the notion that DL is an individual activity. The second note on professional training however leads to questioning whether DL really requires no attention to inter-dependence of members of professional organisations.

The plausibility of both theories on learner autonomy and those on professional interdependence seems to have taken Paulsen's (1993) *theory of cooperative freedom* to another level as he attempted to demonstrate how a distance learner could exercise freedom within a cooperative framework. At one moment, Paulsen declares that "The theory of cooperative freedom can be classified as a theory of autonomy and independence"; and that "Cooperation can be hard to achieve in distance education (because) "a major problem for many students is the loneliness that results from limited access to student peers" (and that) "the urge for individual freedom may intensify the problem" (n.p.). At some other moments, Paulsen proposes the use of ICTs particularly new group communication technologies such as audio conferencing, video conferencing, and computer conferencing, to facilitate cooperation at a distance. It would appear that the *theory of cooperative freedom* attempts to argue for a learner-controlled and a learner-centred use of technologies in DL. For this reason, the theory could be of great use particularly in contexts where distance learners have access to the technologies. Paulsen's theory could as well be useful for planning learner support tools that facilitate student peer interaction.

There are some challenges in arguing for use of modern technologies in countries with less technological development, particularly those proposed by Paulsen. In developed countries, much of DL is driven by technology. Courses are designed with technology in mind and ICT is increasingly being used to assist in learning. This technology enables the student to have direct and immediate access to the tutor, may participate in chat rooms with other learners and the tutor, transmit materials by email, may access the digital library and browse the internet doing their own research or may have lectures posted on the web. There is also a growing trend whereby some courses are available only via electronic means. Telematic centres and multi-medium learning models established in many institutions offering distance education either in dedicated distance education institutions or in dual mode institutions which are principally contact learning institutions but operate limited distance education programmes.

In Africa, this most advanced form of technology is not a viable medium for most DL learners. Many live in very remote areas, generally in isolation. Coping with book learning is itself an innovation

(Pityana, 2004) and the investment necessary to navigate the computer may become a barrier. Because of the acknowledged educational benefit of the computer, the university committed to DL, may be obliged to provide learning centres decentralised from the main campus and train learners in the use of the computer and establish a computer laboratory. Problem of electricity in rural areas has been one major hindrance. Unwin (2005) observes further that problems with computer technology are deeper than mere limited access. They are due to socio-cultural reasons such that even where the computers are available they usually lie idle to be used only in some special occasions.

One area of hope however has been mobile technology. Mobile technology is one of the latest innovations that can be integrated into any type of class structure. M-learning (the use of mobile technologies in teaching/training) is a complementary means for student and instructor social interaction, motivation and learning (Zurita and Nussbaum, 2004). It has further been found that students view m-learning as an important supplementary role to e-learning and that developing countries that face challenges in designing and developing relevant learning environments were reported to have found that mobile technologies are convenient, flexible and cost effective (Motiwalla, 2007). Motiwalla also found that schools and universities were notifying students through the short messaging service (SMS). These mobile notifications increased the number of students who register on-time and increased attendance at seminars and presentations.

4.6 *Student retention*

Student retention is an optimistic perspective which strives to conceal the negative connotation brought about by use of such terms as non-completion or attrition and dropout. The words “persistence” and “retention” are often used interchangeably. Literature however, differentiates the terms by using “retention” as an institutional measure and “persistence” as a student measure. In other words, institutions retain and students persist. Another term commonly used with retention is “attrition”. Attrition is the diminution in numbers of students resulting from lower student retention. In the context of DL particularly, student retention, as a phenomenon, is all about the problem of students who do not complete courses or programmes of study, although this term can also mean enrolling but not starting the course, formally withdrawing after starting studies, ceasing to participate in studies, participating but failing to reach the required standard, or moving on to another course or institution (Tresman, 2002).

Table 2.1: Alternative terminology used in literature relating to retention

Label	Type of leaving	Comment
Attrition	Unclear	Pejorative, cold, quasi-objective
Dropout	Voluntary	Pejorative implies failure
Failure	Involuntary	Initiated by the university or college – unlikely to return to the same institution
Interruption of studies	Voluntary	Possibly the most accurate – implies return at future stage
Leaving early	Voluntary	Implies leaving without return
Non-achievement	Unclear	Measure against qualification gained
Non-completion	Voluntary	Inverse relationship with retention rate
Non-persistence	Voluntary	Unable to stay the course
Stop-out	Voluntary	American terminology not widely used in UK
Survival	Unclear	Negative; challenge; competitive
Suspension	Voluntary	Ambiguous future plans – temporary departure
Wastage	unclear	Pejorative – implies the student gained nothing from the experience
Withdrawal	voluntary	Neutral – no future plan for HE

Source: (Longden, 2002)

There is an implied assumption that all "non-completion" is undesirable as evidenced by words usually used in relation to student retention; Table (2-1) above, most of which carry negative connotations. However, Tresman (2002) presents two scenarios where non-completion cannot always be regarded as negative. The first is within a context of flexible and transferable course offerings designed to widen access, participation, and movement across and between institutions. The second is, in terms of personal development, some students' learning objectives may be, in fact, met without formally completing a course. For example, students who drop their studies may find employment or simply regard non-completion as a brief interruption in their educational journey that is more reflective of personal circumstances than that of their long term educational goal.

Student support is the range of services both for individuals and students in groups which complement the course materials or learning resources that are uniform for all learners, and which are often perceived as the major offering of institutions using DL. Student support is thus pragmatically distinguished within the totality of activities of an DL programme, which overall, of course, could be said

to have as its primary goal the support of students. The primary functions of student support are proposed as being threefold:

- cognitive: supporting and developing learning through the mediation of the standard and uniform elements of course materials and learning resources for individual students;
- affective: providing an environment which supports students, creates commitment and enhances self-esteem;
- systemic: establishing administrative processes and information management systems which are effective, transparent and overall student-friendly (Tait, 2000).

Student support is important in the DL context because of three important reasons (Tait, 2002): because distance learners want support; support is crucial factor for controlling student drop-out; and in DL, student support is embedded in the very nature of the teaching and learning process. In a review of various sources Zepke *et al.,* (2005) identified issues that could be important for teacher education institutions' improvement of their working culture. They formulated thirteen propositions from 146 research items. They tested each proposition by examining the specific literature relating to it.

- Institutional behaviours, environment and processes are welcoming and efficient
- The institution provides opportunities for students to establish social networks
- Academic counselling and pre-enrolment advice are readily available to ensure that students enrol into appropriate programmes and papers
- Teachers are approachable and available for academic discussions
- Students experience good quality teaching and manageable workloads
- Orientation/induction programmes are provided to facilitate both social and academic Integration
- Students working in academic learning communities have good outcomes
- A comprehensive range of institutional services and facilities is available
- Supplemental Instruction (SI) is provided
- Peer tutoring and mentoring services are provided
- There is an absence of discrimination on campus, so students feel valued, fairly treated and safe
- Institutional processes cater for diversity of learning preferences
- The institutional culture, social and academic, welcomes diverse cultural capital and adapts to diverse students' needs (Zepke *et al.*, 2005)

4.7 *Impact on retention of support services for distance learners*

The challenge facing DL institutions is a high rate of student non-completion (Kember, 1995; Flood, 2002; Barefoot, 2004). Relatively it is now acknowledged that DL has higher student non-completion rates that the traditional face to face modes - usually as high as 80 percent or even more (Flood, 2002). At Edith Cowan University, Australia, the attrition rates for external students had been more than

double those for internal students (Thompson, 1997). Studies on student progress therefore have suggested a range of institutional interventions to redress the situation.

Factors for such high non-completion rates are many and tend to vary in different studies. They include: type of course of study and rate of communication with peers ((Bernard and Amundsen, 1989) where a large percentage of total variance between completers and non-completers (between 40 and 58%, depending on the course) could be discovered; problems of time management, lack of study skills, feelings of isolation, alienation and a range of personal issues such as family commitments (Robinson, 1981); non-persistence resulted largely from 'life factors' affecting students and therefore outside the control of institution (Edge, 1982); a combination of 'pull' and 'push' factors (Keegan, 1986), for which a 'pull' factor is one which draws the student away from the course, such as change of job, personal reasons etc, - external to the institution and are therefore outside the control of the institution, while a 'push' factor relates to matters 'internal' to an institution such as their teaching practices, course materials etc, and which can be controlled and modified by the institution.

Other factors include personal positive reasons (Coutts, 1994) suggesting that many students withdraw for such reasons as beginning a new job or the opportunity for further training in the course of their choice; perceptions on programme experiences by individual students (Brindley, 1988) for which it is shown that both completing and non-completing DL students experience similar negative/positive experiences during study. In fact, Garland (1993b) took this further to conclude that the decision to persist or not to persist is an idiosyncratic one, depending on the interpretation of that experience by the individual in their particular environment. Coutts (1994) observes that identifying the cause of drop-out is difficult, given the complexity of the facts involved, but nevertheless advocates the importance for institutions to investigate the causes of student attrition in their institutions and develop their own institutional policies and strategies to minimise attrition rates. However, many of the studies reported above focus on single variables or single sets of variables and the relationship with student attrition.

Alternatively, models consisting of a “complex” interplay of factors and variables have been developed. Tinto (1975) presented a series of causal factors related in a longitudinal process to explain a complexity of student non-completion. He theorised that student attributes and family background affect initial levels of commitment to goals and the institution. These in turn affect academic performance and interaction with peers and faculty, which in turn lead a student to be more or less “integrated” into the academic and social systems of the institution. Tinto proposed that a student who is more integrated is more likely to persist. Subsequent research has supported Tinto's theory in explaining the behaviour of

traditional, classroom-based students at residential colleges, although the importance of individual causal variables has differed between studies. Kember (1989), revisiting Tinto's (1975), influential model, proposed a conceptual model of attrition for DL. It indicated a complex interaction of family context and background, personal motivation, abilities and depth of commitment to completion; previous educational experiences and achievement; and institutional support. Tinto's model has been used to inform institutional retention strategies and to predict attrition rates. It suggests that institutions should focus on the degree to which the learner is able to be socially and academically integrated with peers and the institution, as a way of ensuring retention. Although Tinto's model has been criticised as lacking practicality in DL and in adult learning in general, the central argument on importance of learner integration with faculty members and peers remains relevant regardless of the study system.

Bean and Metzner (1985) developed a major model of student attrition in an attempt to approach student retention in a nontraditional setting like DL. They contended that previous theoretical models of student attrition relied heavily on socialisation on campus. Since the nontraditional student did not have the opportunity to become socially integrated into the institution, a different theory was needed to link the variables that could help explain the attrition process for this group of students. This conceptual model, recognizes the smaller role that social integration plays in attrition for those students. Bean and Metzner consider the psychological outcomes to be important enough to cause a nontraditional student who even has poor academic outcomes to stay in college if the psychological outcomes are positive. Conversely, in a situation where a student has very positive academic outcomes but negative psychological outcomes, that student is likely to drop out.

Similarly, Boyles (2000) presented a model that specifically addressed retention in DL. He identified three sets of variables related to perseverance or withdrawal. These variables are identified as (1) defining variables related to the learner's background, which include the learner's maturity, personal circumstances and previous experience, (2) environmental variables, such as family, social and work commitments and (3) academic variables, which include the learner's previous academic track record and the fit between the learner and the subject being studied. These sets of variables are allied to other individual variables such as academic self-confidence, academic outcomes and ease of integration with the institution, along with institutional size, social integration abilities and the learner's psychological make-up.

The idea that student retention should be studied in a holistic approach features in another model (Berge and Huang, 2004). Berge and Huang recognise the complexity of the attrition issue, but claim

that previous models of attrition and retention are rarely effective and tend to be too complex to apply. They propose a refinement of Boyles' model in which they cluster the range of variables into three primary groups; i) personal variables such as age, ethnicity, gender, income, previous academic experience and personal attributes like self-efficacy for learning, personal organisation and motivation; ii) institutional variables such as institutional attitude, values and beliefs, academic characteristics like structural systems and processes, learner support and degree of congruence between the needs of individual students and the philosophical stance of the institution; iii) circumstantial variables which include the nature and quality of the institution's interaction with the student; academic interactions, course design and facilitation, as well as the interactions that are specific to the learner's life, work, family, responsibility and satisfaction.

Increasingly, therefore, there have been studies addressing the interplay of factors as proposed by the various "complex" models. In Australia, a study was conducted among students to investigate the extent to which any or all of the following variables related to attrition and persistence of external students enrolled in the Fourth Year of the Bachelor of Education course at ECU: age; gender; number of years of teaching experience; number of years since completing pre-service training; stage in the course; current occupation; geographical location; method of communication with tutor, communication with other students and external studies; administrative issues; personal circumstances; work related issues; perceived benefit of completing the course; and relevance of unit content to perceived career needs and interests. Data were obtained from the computerised student records system and two self-administered questionnaires. The study concluded that there was no single variable that was in isolation, responsible in explaining student retention. Many students suggested there were multiple reasons for their withdrawal (Thompson, 1997).

In 2001, Reneland (2002) performed a study in which a questionnaire was distributed among a total population of approximately 500 students that had registered at all distance education courses available at Växjö University in 2000. Of those who responded to the questionnaire, 55% fulfilled their studies. Logistic regression analyses uncovered that the possibility to adjust studies to everyday life and work, is the most important factor to prevent a high dropout frequency. However, several factors under the responsibility of course management also significantly influenced dropout rates, particularly opportunities to exchange experiences and discuss with others. Dropout rates varied significantly among different schools, with School of mathematics and systems engineering having the highest dropout rate, and a majority of registered students not finishing their course. A majority of students who

discontinued their studies considered "*lack of time*" and "change in working conditions" to be the cause (Reneland, 2002).

A study at the Indira Gandhi National Open University has shown that most reasons cited for non-completion are institutional (Fozdar *et al,* 2006). Using a complex variable study, Fozdar *et al*., were able to identify from literature some 20 main responsible variables. They grouped the variables into three categories, namely personal, programme-related, and student support-related reasons. On the basis of the three categories they tested the reasons among students and found out that nine reasons were common. The reasons in the order of frequency are study centre being too far from residence; insufficient academic support from the study centre; programme being too consuming; difficulty in attending lab sessions; difficulty in studying science through distance; absence of interaction with other students; difficulty in term-end examination paper; insufficient counselling sessions; and lack of responsiveness from study centre. This study adds weight to previous studies that associate student non-completion with institutional efficiency in planning and carrying out its learning programmes as well as support service provision to distance learners. All the nine identified reasons basically follow under the range of institutional arrangements and working cultures (Leach and Zepke, 2005).

Using the "complex model", (Shin and Kim, 1999) ascertain that individual or personal characteristics like student ability do not account for non-completion. They instead saw the role of institutional support as paramount. The face-to-face sessions in particular determine students' persistence in a course. Their argument is well linked with their other argument that the more the time spent in studies the more likely the student will excel in studies. Additional contacts between instructors and students and among students themselves will lead to increased time on study. The study by Shin and Kim and other studies based on the role of the institution perhaps are more realistic in analysing the predictors of student learning. With reference to Tinto's model, the institution plays a central role especially in creating a sense of integration.

Many studies have been conducted to investigate how student support services benefit the students academically. The importance of the regional centres (Cole and Coats, 1989, Leach, 1996, Kember and Dekkers, 1987) and the role of the faculty members (Olcott and Wright, 1995) in the students' academic achievements have also been investigated. A research at the Open Learning Institute in British Columbia (Sweet, 1986) studied completing and non-completing students. Adding ratings of telephone exchanges between students and course tutors, the study explained 32% of the total variance in student withdrawal decisions. Telephone interaction was positively related to persistence.

Using a one lecturer experience of using texting with her students, Horstmanshof (2004) has shown how SMS can effectively be used to support and encourage students to persist in a programme. The informal nature of SMS, according to Horstmashof, is necessary as it fosters the sense of belonging and student integration in the university community, faculty support, peer support and classroom comfort. With a similar objective in student support, the University of Wolverhampton invested in a large-scale scheme that uses bulk SMS texting to enhance student support, inclusion and retention (Riordan and Traxler, 2005).

Mobile learning (Fozdar and Kumar, 2007, Cook, 2006) could be used to enhance retention. In their study which looked into students' attitudes and perceptions on the effectiveness of mobile learning, Fozdar and Kumar (2007) designed a questionnaire consisting of 33 items. After refining the items they administered the questionnaire to 100 BSc students from which 65 were returned. The questionnaire was a five-point Likert scale with 'strongly agree' and 'strongly disagree' as anchoring points. They employed descriptive statistic analysis mainly for percentages and mean scores. The authors reported having established that mobile learning was related to improved student retention. Offering mobile learning could be one method of improving retention of students by enhancing their teaching/learning and improving the efficacy of existing student support system. The biggest advantage of this technology is that it can be used anywhere, anytime. Moreover, as mobile phone usage explodes, it offers DL institutions easy access to a larger number of learners (Fozdar and Kumar, 2007).

Face-to-face tutorial sessions (Amundsen & Bernard, 1989) could be one of the most effective ways of supporting distance learners, although literature (Unwin, 2004; Sanga *et al*, 2007) tend to limit the use of tutorials as only an aspect in a blended learning. The role of the faculty as an academic support is also essential as it plays a key role in interpreting the meaning of a course and resolving difficulties through collaborative activities. The faculty has the expertise that provides access to quality instructional materials, thus ensuring a high level of learnability that leads to the improvement of learning among distance education learners (Olcott and Wright, 1995).

The importance of regional centres (Kember and Dekker, 1987; Leach, 1996) has been conceptualised in a notion of provision of a local human interface of DL. Regional centres have the potential for providing tutorials by faculty members, study group meetings and resources such as the library and ICTs (Cutting, 1989). Through regional centres learners could address the feeling of isolation (Lowe,

1997), not virtually but physically, as new DL students are usually desperate for human contact, not just for information from others (Walker, 2002).

Some scholars have reported on the potential of flexible learning (Brown, 2005, Sanga *et al*., 2008); referring to a system of DL which involves a variety of teaching and learning methods: face-to-face, computer-mediated learning and m-learning. This model, it is argued, could be more attractive to many distance learners particularly in developing countries.

4.8 *Conclusion*

Chapter Four has presented a review of literature on student retention in DL programmes. It has been reported that DL like teaching has low rates of retention making it important to develop measures to address the issue. It has been reported that various models have been developed for studying and addressing the issues. More importantly the chapter has pointed to various possible strategies DL programme designers could adopt in order to ensure student retention is maximised. Such strategies include use of study centres for tutorials and student interactions (Kember and Dekker, 1987); use of face-to-face meetings (Amundsen and Bernard, 1989, Leach, 1996); flexible and blended learning (Brown, 2004; Unwin, 2005, Sanga et al, 2008); and use of m-learning and m-support (Cook, 2006; Fozdar and Kumar, 2007; Horstmanshof (2004), Riordan and Traxler, 2005). The following chapter will report on the research methodology adopted in this study.

Chapter Five: Research Methodology

There is no method but to be very intelligent - T.S. Eliot (1888–1965)

5.1 *Overview of the chapter*

This study was conducted so as to explore student support and the impact of such support on retention. Specifically the study sought to look into answers for four research questions: 1) what is the context in which the Licensed Teachers Programme was implemented? 2) How do student teachers learn in a distance learning mode? 3) How do student teachers learn how to teach? and, 4) What is the impact of support on student retention? This chapter makes a case for use of the mixed model approach to undertake this study. Data collection and analysis procedures are outlined before discussing the study's rigour and ethical issues. In this study 'mixed model' is preferred to 'mixed methods' as 'mixed model' is more appropriate for research in which different approaches are applied at any or all of a number of stages (Tashakkori and Teddlie, 2003, p.44). The mixing in this study extends beyond just the methods used in the study.

5.2 *Background to educational research*

The traditional way of conducting educational research has been the use of controlled empirical studies based on a positivist belief system. This positivist educational research attempts to uncover social facts about humans which apply at all times and places. It is characterized by the assumption that human behaviour can be explained by the social facts, which can be investigated by methodologies that utilize the deductive logic of the natural sciences. Researchers look for distinguishing characteristics, elemental properties and empirical boundaries, and tend to measure 'how much' or 'how often' (Nau, 1995). As such, quantitative research has proved to be appropriate especially to measure overt behaviour and to measure descriptive aspects of educational phenomena. Its reliability and validity can be determined more objectively than qualitative research. In addition, quantitative studies allow comparison and replication more easily (Jones, 1997).

Quantitative educational research faces criticism for making educational settings become artificial when variables start being controlled. It is argued that its assumption that "people can be reduced to a set of variables which are somehow equivalent across persons and across situations" (Reason and Rowan, 1981), is potentially misleading. The assumption leads to weakness of the approach: it fails to ascertain deeper underlying meanings and explanations even when the study seems to be significant, reliable and valid. Given the complexity of human beings and their behaviour, empirical studies become

problematic, particularly, as Neuman (1989, p.41) puts it, "discrete variables and their relationships do not seem to be sufficient to deal with the complex interactions and patterns of human behaviour".

For constructivist educational research, a relativist ontological position is taken, whereby reality can have multiple interpretations. Truth is taken to be "a matter of consensus among informed and sophisticated constructors, not correspondence with an objective reality" (Guba and Lincoln, 1989, p.44). This kind of research encourages researchers to look at context as a dynamic whole, including individual and socio-historical backgrounds (Duffy and Cunningham, 1996). Obviously this is a sharp contrast to the traditional objectivist perspective that views context as separate from the researcher and in which the context is actually manipulated. Qualitative research (the paradigm for constructivists) is credited for its ability to allow the cognitive and affective components to be explored in greater depth than quantitative methodologies. It encourages the informant to introduce concepts of importance from the emic (cultural-specific) aspect rather than adhering to subject areas that have been pre-determined by the researcher.

Objections to the qualitative approach do exist, the concept of validity being at stake. It is noted that determining the truthfulness of findings is difficult. The samples used in such studies can be biased and might not represent the population from which they are drawn (Jones, 1997). As will be argued and demonstrated within this chapter, the use mixed model approach may enable the researcher to avoid potential criticisms of the single methodologies.

5.3 *Research design*

The choice of research design used in the study was guided by information needed to address the research questions, moderated by objectives of the study, available resources (including time, human and material resources), accessibility to the study area and respondents or participants, expertise and experience of the researcher, and the use to be made of the results. Several authors (Brannen, 1992, Tashakkori and Teddlie, 1998, 2003, Mellenbergh, 2003); have debunked the case of qualitative and quantitative methods being presented as diametrically opposed to each other, and have instead emphasized their complementary use. As Mellenbergh (2003, p.215) puts it, 'qualitative and quantitative research differ in style, but they do not need to differ in their underlying logic of inference… as long as quantitative and qualitative research have a set of methodological rules in common, they are not contradictory, they can support each other'.

The crucial aspect in justifying a mixed methodology research design is that both single methodology approaches (qualitative only and quantitative only) have strengths and weaknesses. The combination of methodologies on the other hand, can focus on their relevant strengths, by which the researcher should aim to achieve a situation where "blending qualitative and quantitative methods of research can produce a final product which can highlight contributions of both (Nau, 1995, p.1), and where "qualitative data can support and explicate the meaning of quantitative research" (Jayaratne, 1993, p.117).

Guided by these considerations, this study used a survey and case studies (in that sequence) in a 'mixed model approach'. The use of more than one particular methodology in a single social research is viewed as the best way since as Neuman (1989, p.138) puts it, 'it is better to look at something from several angles than to look at it in only one way'. This study was designed to be in two-phases involving a survey (phase one). A questionnaire was to collect general data from the participants; to explore the perceived areas of support to be able to complete their courses in time; collect information on school capacities for supporting student teachers and to establish a general understanding of student support at school level. It also was used to identify cases of interest that will be purposively sampled and studied in the second phase of the study. The second phase (case studies) was used to explore in-depth the central theme of student support at school level.

5.4 *Research approaches*

This study employed two basic approaches of data collection in a single study, survey and case study. A survey is a form of planned collection of data for the purpose of description or prediction as a guide to action; or for the purpose of analysing the relationship between certain variables (Oppenheim, 1966). It is a structured list of questions presented to people that may be written or oral, face to face or over the phone or by the use of the internet or a web-based software (Dillman, 2006). The survey data collection preceded and informed the case study data collection and analysis.

Conducting research studies is increasingly becoming a more cautious and sophisticated kind of activity that requires regular justification of whatever methodology investigators employ. The use of case study methodology, in particular, has been criticized as having limitations that makes it incapable of leading to generalizing conclusions. One obvious criticism has been of its microscopic nature i.e., reliance on single cases. The microscopic nature does not disappear by simply increasing the number of cases (Yin, 2003). For Yin, however, even a single case can be used to generalize results provided it is well designed and analysed and seeks to test theory.

Recent dynamics in research designing across paradigms has made case study methodology more acceptable. The popularity of mixed methods research (Brannen, 1992; Creswell, 2003; Tashakkori and Teddlie, 1998) reveals how taking advantage of positive aspects from both quantitative and qualitative paradigms could be achieved. The thinking is gradually beginning to dissolve the wall between qualitative and quantitative methods as well (Johnson and Onwuegbuzie, 2004, Smith and Hershusius, 1986). Particularly De Vaus (2001, p.10) states that 'it is erroneous to equate a particular research design with either quantitative or qualitative methods' and thus insisting that it was equally erroneous to think of case studies as solely qualitative research.

De Vaus' (2001) thinking then requires rethinking of some mostly acceptable definitions that view case studies as being qualitative. Generally, it is acknowledged that case study methodology is triangulated research strategy – involving triangulation of theories, data, methodologies and even investigators. It is collection and presentation of detailed information about a particular individual or a small group, frequently including the accounts of the participants themselves. Accordingly, case studies are categorized into: exploratory–preferably as a prelude to social research; explanatory–suitable for doing causal studies; and, descriptive-a study that requires the investigator to begin with a descriptive theory (Tellis, 1997).

Designing case studies that have construct validity is especially problematic because of potential investigator subjectivity. Yin (1994, p.20) identified five components of research design that are important for case studies: a study's questions; its propositions, if any; its unit(s) of analysis; the logic linking data to the propositions; and the criteria for interpreting the findings. Apart from that, Yin (1994) presented the concept of a case study protocol that requires investigators to prepare not only the study instruments but also procedures and general rules that should be followed in using the research instruments. He went on to present features of a typical protocol: an overview of the case study project (objectives, issues, topics being investigated); field procedures (credentials and access to sites, sources of information); case study questions (specific questions that the investigator must keep in mind during data collection, and a guide for case study report.

While Tellis (1997) sees a little concern on internal validity (except if the study is a causal (explanatory) case), his concern is on external validity. Researchers using case studies can address external validity by using mixed model designs and fuzzy generalisation (Fidler, 2007). The two concepts are not the same. Fuzzy generation (Bassey, 2001) refers to presentation of a generalisation that offers possible

solution to the problem under study – one that is neither likely to be true in every case, nor likely to be untrue in every case. Logically then it is left to the consumer of the research findings to decide the trustworthiness of the findings. Mixed model design (Brannen, 1992; Creswell, 2002) employed in a study can increase the likeliness of the findings to be generalised to a large population.

5.5 *Participants and setting*

5.5.1 LTP student teachers at a face-to-face centre

This cluster sample of respondents consisted of the licensed teacher programme (LTP) student teachers who had gathered at the Kleruu Teachers' college in Iringa for their first face-to-face meeting in April 2007. The Kleruu cluster was a meeting for student teachers who came from all the four regions of Southern Highlands Zone of the country, namely Iringa, Mbeya, Ruvuma, and Rukwa. The four other clusters were conducting face-to-face meetings all over the country at the same time. They were Monduli Teachers' College that accommodated student teachers from Manyara, Arusha, Kilimanjaro and Tanga regions; Mpwapwa Teachers' College for student teachers from Dodoma, Singida, Tabora and Kigoma regions; Butimba Teachers' college for student teachers from Mwanza, Shinyanga, Kagera, Mara regions; and Morogoro Teachers' College for student teachers from Mtwara, Lindi, Coast, Morogoro and Dar-es-Salaam regions. All centres had to accommodate a total of 1500 student teachers with an almost equal number of 300 student teachers each. Kleruu Teachers' college was chosen as a single-stage cluster sample in which all participants present at the centre were asked to fill the student questionnaires.

All 223 student teachers who attended the Kleruu meeting were asked to participate in the study, out of which 221 returned the filled questionnaires each. I wanted to collect as much information as possible regarding the student teachers, the schools, the student teachers' attitudes on teaching and on DL, their satisfaction on school support, and whether they were willing to participate in the second phase of the study. They were asked to provide their contact details if they were willing to continue being involved in the study. All returned questionnaires, except three, indicated that student teachers were willing to take part in the second phase and thus provided their names, names of their schools, postal and email addresses as well as telephone numbers. After preliminary data analysis of the first phase, six student teachers were chosen for the second phase. Four cases were analysed, and are presented in Chapter Nine. The student teachers' personal information further formed a sampling frame for the follow up SMS. Out of the 221 respondents, 208 were identified as potential mobile phone respondents

to whom SMS were sent. It is from the same sample of the 221 the six school case studies were identified.

5.5.2 School heads of the four case studies

During the second phase of the study six schools were involved in the study as case studies. Apart from interviews with student teachers, school heads were asked to take part providing information regarding the school in general and the LTP student teacher(s) in particular. I was interested in establishing how the school management perceived the LTP, how the school management evaluated the use of the LTP student teacher, and. whether school management had incorporated DL student teacher support into their management planning and their daily school management activities.

The choice of cases was guided by Schofield's (1993) suggestions that for typical situations, for replicating future settings, and for ideal situations; the cases should be chosen from among typical examples, among leading edge practice, and among good practice, respectively. This study was interested in identifying good practice. Another consideration was having multiple cases, and where possible, in even numbers (Tellis, 1997) that would make it possible for case replication. By using even numbers of cases replication could simultaneously be viewed in both perspectives, literal and theoretical, where the former refers to a replicated study that expects to predict similar results, and the latter refers to a study expected to predict contrasting results for predictable reasons.

5.5.3 LTP coordinator at the OUT headquarters in Dar es Salaam

One male LTP official was purposively involved in the study. His involvement sought to elicit information on LTP planning, designing, and coordination. The OUT coordinator assisted further in identifying some useful programme documents that were used in making analyses of the management and student issues of the programme. Two interviews were conducted with the coordinator during the phase one and phase two of the study. The first interview, which was conducted via telephone, was on the overview of the programme. I wanted to get general information on the planning of the programme. The coordinator provided some useful information regarding the history of the programme, the ascribed roles of partners of the programme that is the OUT, the Ministry of Education and Vocational Training, the participating schools, the local teacher education colleges, and the student teachers. I was interested in obtaining numbers of student teachers involved in the programme, the way in which their training was planned, the roles of each partner, and his initial thoughts about student support particularly at school level. The second interview was conducted face to face with the coordinator during the second phase. I wanted to elicit information on the functioning of the programme during the

period of implementation – experiences on student registration, acquisition of study materials, student participation in the first face-to-face meeting, and observed prospects and challenges.

5.5.4 Programme coordinator at the MoEVT

One female respondent was interviewed at the headquarters of the MoEVT. A number of issues were involved in the interview. They included the place of licensed teachers in the SEDP; recruitment and placement of licensed teachers (LTs); remuneration package for the LTs; induction of the LTs; in-service training for the LTs particularly the role of experienced teachers in schools, mentors, seminars etc; the role of educational officers at the local government level in managing the LTs; attrition rates for teachers in general and LTs in particular; the Ministry's point of view on the state of LTP – design of the programme, costs, availability of study materials, student progress and prospects for graduating in three years; the future of LTs and LTPs; and finally lessons learnt from the use of LTs in teaching and the use of LTP in collaboration with the OUT. Much information collected through this interview is reported in Chapter Six. The official also identified some documents to be reviewed in this study. They included SEDP documents, and specific LTP documents.

5.5.5 A regional educational officer

I wanted to get insight from field/regional educational officers on how they viewed the training of the newly employed school leavers. A detailed interview was conducted with a regional educational officer and he was able to highlight the magnitude of the challenge of training the untrained teachers. The interview was conducted during the second phase of the study. Responses from this interview helped in reshaping the choice of schools for the case study as according to his knowledge some student teachers were no longer working in their stations and his office was compiling a report on attrition of the new teachers. At this stage, it was further thought important for this study to make a follow up of the student teachers by a use of follow up telephone interview of a sample of students to establish attrition, and not merely non-completion of the OUT study programme.

5.6 *Instrument designing*

Mixed model design was adopted for this study. Designed in two phases – a survey phase, and a case-studies phase - the study was planned to employ a variety of data collection instruments. The instruments included a questionnaire to DL student teachers (survey phase), and interview schedules, observational checklists, and documents (case-studies phase). The mixed model in general terms, is

reflected not only in methods but in combinations of sampling, data collection, and data analysis techniques (Sandelowski, 2000).

5.6.1 Student questionnaire

This was a research instrument for phase one. A student questionnaire was designed to capture the DL students' demographic data, students' perceptions on DL and on school-based support, students' conceptions and attitudes on school-based support arrangements, and finally students' willingness to participate in the second phase. The purpose for doing this survey was to have a large number of respondents who could describe their schools and the perceived support from those schools and from which sample of cases could be drawn for an in-depth case-studies phase. Specifically, the instrument was designed to explore school-based support services from the student teachers perspective. The key question was whether there was opportunity for: school-based professional training, informal peer interaction, peer lesson assessment, formalized mentoring, school-based private tutorials, school-based cooperating tutors, and others. The questionnaire further sought to establish how the student teachers described the support services; whether type of school, gender differences, age differences, past experiences, subject area of study, attitude towards teaching, and attitude toward DL had effects on the students' perceptions on school-based support. The questionnaire was further used to seek student teachers' willingness to participate in the second phase of the study.

The design of questions in the questionnaire varied from open-ended to closed responses (and this is one of the basic features of a mixed model design). When research techniques are mixed in a single study researchers are likely to obtain some better results (Dillman, 2006). Dillman cited an example of a simple question that asked "what is your marital status?" as open-ended in telephone and then the same question asked via internet but offering answers to choose – single, married, separated, divorced, and widowed, results differed significantly with responses for 'single' decreasing consistently by 10%. He concluded that open-ended questions asked by strangers, like researchers, are likely to receive casual answers that lack detail. On the other hand, if researchers impose detailed options, the respondents are likely to offer detailed and accurate answers.

There are two key issues to note regarding the use of questionnaires in this particular study. The use of a questionnaire was believed to have a potential of getting responses from a large sample (in this case 300 respondents out of a population of 1,500 potential respondents). Most importantly, due to its level of standardisation and structure, the questionnaire could allow well-trained assistants to administer the survey as intended by the designer or to be filled by respondents themselves with minimal or no

supervision at all (Axinn and Pearce, 2006), and therefore it was easy to administer the questionnaire at a distance. The main weakness of researching at a distance through mail, or web questionnaires or even trained interviewers in survey administration is that the process reduces or eliminates the need for the survey designer – the researcher – to have direct contact with people being studied. Natasi & Schensul (2005, p.183) detail why it is important for the researcher to play the central role in a study that intends to capture the emic perspective of the respondents:

> *The open-ended nature of data collection and efforts to capture the emic perspective influence the roles of researcher and participant in qualitative research. First, the researchers themselves are the primary instruments of data collection. Thus, the quality of data is highly dependent on researcher's skill in observing, interviewing, gathering physical evidence (e.g., records, program products), and analyzing qualitative data. Second, the interpersonal skills of the researcher are critical to entering the natural settings, data collection, and negotiating meaning. Third, the study participants are much more active in the process of data interpretation*

For that reason, this study regarded survey as only a part of the wider study, and indeed a preparatory phase for the in-depth study that would involve techniques that require spending time together with the respondents.

5.6.2 Interview schedules

Ethnographic interviews could be contrasted with structured questionnaires. Interviews, unstructured or semi structured can be much more flexible, allowing the respondent to change the course of the conversation and to bring up new issues that the researcher had not preconceived. Researchers like Sieber (1973), would prefer this technique as it is more likely to yield some new hypotheses than highly structured surveys.

There are some weak points regarding this technique. Semi or unstructured interviews are usually too intensive and too demanding to be carried out with large numbers of respondents. Trained interviewers are not suitable for this type of questioning technique since different interviewers' characteristics can influence the respondents' answers to questions; and of particular importance, the principal researcher's direct participation keeps on informing the whole data collection process. Hence, the use of this method limits interviews to the principal researcher and hence reduces the number of informants who could be interviewed.

All these points taken aboard, the study had only a few informants to interview – two programme coordinators, one educational officer, four heads of school, and four student teachers who were in the chosen case schools. Case in this study referred to a school. The content of the schedules differed

from one category of respondents to another. The head of school interview schedule and the student teachers' interview schedule involved questions on the socio-geography of the school, characteristics of the informant, perceptions on teacher education by distance, perceived support services for student teachers, professional development strategies and school culture. The interview schedules consisted of some questions seeking clarification of some issues raised in phase one of the study. Interview schedules for the programme coordinator and of the educational officer on the other hand, were on the management perspective of the programme.

Some social scientists argue that any data collection that involves interviewing distorts the reality because of the interference from either the interviewer's interpretation of the respondents' answers or the respondents' own lack of knowledge about their motivations and actions (Axinn and Pearce, 2006). For this reason, student teachers in particular were asked to keep diaries at least for a week before the interview day on which the interviews would be based. The use of diaries has been observed to be useful in enhancing respondents' memory.

5.6.3 Documents

A broad definition of a document is a formal piece of writing that provides information or acts as a record of events or arrangements. There are two advantages of using available records and documents in research (Axinn and Pearce, 2006). One is that written records like government statistics or school records can inform the researcher more accurately than would an interview for example. The second is that since most of the official records are relatively unstructured, at least not in the structure of the study, it is quite possible for the researchers to discover something they had not thought of before the search began. A caution however, is that the researcher has no control of the data (Tashakkori and Teddlie, 1998, p.109). Tashakkori and Teddlie would prefer a thorough scrutiny of the documents to ascertain not only the validity and reliability of the document but also to put in mind two more questions: "'were data collected correctly*? And* 'Were the data kept in their entirety*?*'".

The study employed school and student records, as well as other LTP documents within respective schools and at the OUT headquarters. At OUT student records on admission, course registration, and academic progress were studied. School records on teacher professional development and the student teacher's own records on assignments submitted for marking, as well as practical and teaching practice records.

5.6.4 SMS and email

Internet has been observed to be the cheapest means of data collection but whose access and response rate are low (Dillman, 2006). Early attempts in this study to use emailing during pilot study had shown weakness of the internet as a way of data collection, particularly within the context of Tanzania due to lack of internet connectivity. With this understanding, internet was used as a means of communication between the researcher and research assistants, and later on emailing was used as a strategy for seeking detail of SMS data.

5.7 *Piloting the study instruments*

Piloting refers to conducting specific pre-testing of a particular research instrument such as a questionnaire or an interview schedule. Most of measurement errors can be detected and worked out during piloting. Pilot studies might give advance warning about where the main research project could fail, where research protocols may not be followed, or whether the proposed methods and instruments are inappropriate or too complicated. The warning is, “do not take a risk, pilot test first” (De Vaus, 2001) (p.54) captures the essence of conducting pilot studies.

By its nature a mixed model research design involves elements of pilot studying. A “researcher may start with a qualitative data collection and analysis, and use the results to design a subsequent quantitative phase of the study” (Tashakkori and Teddlie, 1998, p. 47) and vice versa. The most common way of piloting however is that of pretesting the wording and the order of the questions or the range of questions on multiple-choice questions. Also pilot studies could be conducted to test ways of distributing and collecting the replies.

During the initial stage of designing the questionnaire used in this study a set of questions was designed and sent to 28 OUT student teachers via e-mails. The 28 pilot subjects were not part of the targeted population but were believed to be similar to the target population. I was interested in receiving responses regarding areas of ambiguities, relevance of the questions, time taken to complete the questionnaire, and whether e-mail could be used for data collection instead of using research assistants. The pilot questionnaire provided the respondents a month to complete the assignment, after which analysis was to be done. Two more emails were sent as reminder within the month.

Results of the pilot study revealed three major issues, that i) the use of emails for this study was unfruitful. After the month period, I had received replies from four (4) respondents only. In the main survey, I opted for use of research assistants instead. ii) It was clear from the four responses; most

school-based teacher education jargon used in the questionnaire was unfamiliar to all the respondents. Terminologies like mentoring, reflective learning, peer tutoring, professional development sessions, and a host of jargon of that kind were to be discarded and replaced by common vocabulary in the main survey; and iii) The basic question in the questionnaire (phase one) was open-ended requesting respondents to indicate areas of support that they believed were necessary for their study programme. The respondents simply mentioned a specific course like *mathematics*, or *informatics*, or *philosophy of education*, without offering any details of what exactly they required to be done with such courses. According to Dillman (2006) this is to be anticipated as the volunteering respondents are unlikely to offer much detail if the question is barely open-ended, particularly to a researcher who is a stranger to them.

5.8 *Data collection*

Data collection as a process has been going on since the beginning of my PhD pursuit. However this section will concentrate on the process involved in doing the survey and case studies. Field data collection began in April 2007 in Tanzania, with some assistance from two research assistants. Phase one (survey) data collection: Internet has been observed to be the cheapest means of data collection but access and response rate are usually low (Dillman, 2006). The early attempts in this study to use e-mails during pilot study had shown the weakness of internet as a way of data collection, particularly within the context of Tanzania due to lack of internet connectivity. With this understanding, internet was only used as a means of communication between the researcher and the research assistants. Between March and July 2007 I had exchanged e-mails with two fellow lecturers at the OUT regarding this study 22 times, in the process of getting to know what was required of them as research assistants in this particular study. The role of the research assistants was:

- download, print and bind the questionnaires
- number of the questionnaires
- carry the questionnaires with them when they were attending the first face-to-face session in April 2007
- distribute the questionnaires to student teachers attending the meeting
- collect the replies
- fill some key information on results of the process in a prepared form
- keep the filled questionnaires safe for analysis later.

Learning from the experience of working with research assistants, it is possible to collect data at a distance, provided the researcher and the assistants share a common understanding of what is to be done, and there is commitment, especially on the side of the assistants. The role of effective communication in this context is vital.

Phase one data collection process involved the following activities: in April 2007 student survey was conducted in Tanzania, Questionnaires were taken to a face-to-face meeting where LTP students were gathered, and were distributed to all the students gathered at the centre. The questionnaires were immediately collected from the respondents after completion. This was immediately followed by preliminary analysis to guide sampling and preparation of instruments for case studies.

During phase two (case studies) data collection, cases were identified from the analysis of the questionnaires. More issues emanated from the results of the questionnaires for which research instruments – interview schedules and documents - were developed and reviewed to further understand the phenomena. I spent four months in Tanzania (August-November 2007) for the first field study. Several activities were involved – doing preliminary data analysis of the questionnaires, developing case study instruments, making telephone calls to the earmarked student teachers and their heads of school, making the actual visits to schools, and locating relevant documents. The actual visits to schools were made three times to each of the schools involved in this phase. The visits were conducted after initial contacts by telephone. The first visit was normally used as a familiarization to the student teacher, the head of school and the school in general. The student teachers were asked to keep record of what they would do in classroom and outside classroom during the following week so as to enhance their memory. The second visit, the following day, was made as a continuation of school observation and for interview with the head of the school. Observation on school focused on facilities such as offices and the library. During the third visit that was conducted a week later, the student teacher was interviewed. The student diary saved as a reference point. Search for relevant documents was mainly conducted during this phase. During this period, I also visited the OUT Library and Faculty of Education for student records. In addition, the Ministry of Education and Vocational Training statistics on teacher recruitment and training were sought and analyzed.

The second field visit to Tanzania was conducted in November 2008. Heads of school and student teachers were interviewed for the second time, additional documents were on LTP progress and students' records were identified. During the second visit to Tanzania, further interviews were conducted with officials at the Ministry of Education and Vocational training.

While the main data collection stage involved the use of a survey and case studies, between April 2007 and November 2007, particularly, decision to stay or drop out of the programme was further studied using short messaging service (SMS) and email communication with respondents who had provided their phone numbers and email addresses when responding to the questionnaire. Email and SMS were used as follow up mechanism, from February 2008. Although emails and SMS are two different communication systems, they are put together because in this study they were systematically combined, particularly at data collection stage. About 208 (out of the total sample of 221) respondents (95%) had provided mobile phone numbers, while 39 (18%) of the respondents had provided their email addresses. However, only 13 (6%) of the respondents had initially responded that they had internet connectivity at their workplaces.

In February 2008 an email was sent to all 39 respondents who had provided e-mail addresses. The message asked the respondents to provide some information on whether or not they were still in LTP. Those who were still in the programme were asked to provide further information on whether they had done all assignments, tests and examinations for the first year and how they had performed. Those who were no longer in the programme were asked to provide information as to what they were doing and any reasons why they had dropped out.

The instant message I received was a failure-of-delivery message from the mailer. The mailer could not find 13 of the addresses. The mailer also could not deliver the message to another 16 addresses because their accounts had already been disabled or discontinued. Respondents who actually received the mail were 10 out of whom only three respondents did respond to the message. Generally, message delivery rate i.e., 10 (5.6%), corresponded with internet connectivity at workplace. The 29 emails were returned as they were either non-existent or had been disabled or discontinued. Those respondents, who had once had e-mails, presumably before they had been posted to rural areas, had lost their email addresses due to inactiveness. Email response rate was too low thus a different strategy had to be adopted, and that is a combination of emailing and SMS.

In February 2008, an SMS was distributed to all 208 respondents who had provided their mobile phone numbers. The SMS asked the respondents to provide some information on the progress on their programme of study particularly first year experience and results for their assignments, tests and examinations. About 59 (27%) responded to the SMS, six of whom confirmed having dropped out the

programme. The six respondents were willing to share their stories and the experiences that led to quitting teaching and OUT studies.

The distributed SMS read:

> *Hello, thanks for completing my questionnaires at Kleruu Teachers College in April 2007. How are you getting on with OUT studies? How was the first year? Mr. Ng'umbi, University of Reading, England.*

Immediately, the respondents began flashing back, not sending SMS back or calling. The habit of quickly leaving an intentional missed call, otherwise known as 'beeping' has become part of normal communication pattern, and it basically means the 'beeper' has received the message, or he/she is asking the other party to call, and he/she is ready for the call at that particular time (Donner, 2007). I had not expected them to call. I simply needed an SMS which could be stored and retrieved latter, simply and cheaply. I thought of sending them another SMS to try and request them to send replies through SMS, but that would mean jeopardizing response rate as would be trying to impose conditions onto respondents, who happen to have their own way of doing things, and among those who might have been concerned about the cost of sending an SMS reply. I had to respond to the 'beepers' and have a conversation of not less of three minutes; and write down the main substance of the conversations.

I then resorted into persuading them into using emails by sending another SMS:

> *If you have access to internet please contact me at* m.w.ngumbi@reading.ac.uk

This strategy increased four (4) more respondents, making a total of email respondents into seven (7).

I noticed that respondents who had declared that they were no longer OUT students had been reluctant in exchanging SMS or emails; hence I decided to send them all an SMS:

> *Hi, I understand U are no longer OUT students, but I still consider U'r participation very important 2 my study. Please email me at* m.w.ngumbi@reading.ac.uk

I had a few respondents who were very good at exchanging SMS and emails. They were mainly, but not all, those whom I had included into case studies. I kept note of personalized email and SMS exchange. I asked one respondent who kept on responding to my emails almost instantly to describe internet connectivity in his office or home. (I had assumed he was in an urban area and that he must have had a computer to access internet). Well, his response was simple and clear: '*I simply use my mobile phone'.*

Experience from this study regarding the use of SMS and email in research:

- Fifty nine (59) respondents out of 208 responded to the SMS (28%). Six respondents out of 59 who responded to the SMS confirmed that they were no longer OUT students. The six respondents were willing to share their stories and the experiences that led to quitting teaching and OUT studies. Only seven (7) out of 39 email users responded. The number of reminder messages to email respondents seemed to generate more information from the same respondents, suggesting that response rate remains the same. However by using SMS, more email users were recruited. One of the respondents actually opened an email account as a response to an SMS appeal for use of emailing. This would suggest that access to technology is the key factor in increasing or reducing response rates.
- More than 75% of SMS responses were received in the same day and the remaining quarter the following two day. Emails on the other hand had a time lapse varying from a couple of minutes, for the user of mobile emailing, to over a year, among those using internet facilities at a face to face meetings!
- When mobile emailing, the term used by Mehra (2008) to refer to accessing email via mobile phones, was used by an email respondent, time lapse and frequency of emails were significantly improved. The use of mobile email, is gaining popularity due to 'easy availability of free mobile emails on the basic mobile hand set allowing users to read, reply, compose, forward, sent and delete emails from their mobile phones'. Mehra (2008) observes that while SMS is often used for personal short messages with the size of the text not exceeding 160 characters per message, mobile email service can be utilized for sending from a short to a long descriptive email, with attachment of pictures, sound, text, as well as pdf files.
- The character limit in a single SMS might have affected the first SMS. It appears that the SMS was too long for some respondents' phones to appear as single message. As such, the affected respondents could not get the last piece of information which had the researcher's name and address. I realised that after receiving some SMS demanding to know who the sender was or saying they had received some incomplete messages. Later, computer word count confirmed that number of characters including space were actually 198. This could be avoided if the message was first written and characters checked on computer. The idea of beginning the message with sender's particulars could also have introduced the researcher and hopefully could have convinced more respondents
- Experience from this study shows that SMS have the potential for generating brief pieces of information with immediate responses. Emails, on the other hand, have been more useful for a detailed account of events and situations in schools, although responses are far less than

SMS. SMS had some very brief responses which at some moments appear to lose meaning. Consider a response such as 'OK' or 'Thanks' for a response for the first SMS above.

The following table (Table 5-1) summarizes data collection strategy for each for each question:

Table 5—1: Data collection strategy

Research Question	Questionnaire	Interviews	Documents	Follow up SMS and emails
RQ 1. Context of the programme	Yes/no item on school factors	LTP coordinators Heads of school Student teachers	Education policy LTP documents	
RQ 2. Learning through the DL mode	DL attitude rating scale Open-ended item on DL support needs	Student teachers School heads	Student progress reports	
RQ 3. Learning to teach	Yes/no item on school factors 5-point scale item	Student teachers School heads	Student progress report	
RQ 4. Student retention		Student teachers School heads	Statistics on student retention Student progress reports.	SMS and email exchange with LTP student teachers

5.9 *Data analysis procedures*

Data analysis has been a continuous process since data collection. Analysis of data collected in phase one informed data collection in phase two. As such, collection and analysis of quantitative and qualitative data were integrated and formed a single study (Yin, 2006).

An ideal data analysis procedure involves the following pattern: coding, tabulation, determining the level of measurement, data entry, and handling missing data (Burgess, 2001). Each answer in the questionnaires was pre-coded, except for the open-ended question whose answers were analysed and coded later. Each questionnaire was numbered. The constructed SPSS database was then used in performing descriptive statistics when describing respondents' personal data, their perceived areas of support, their attitudes on teaching and on DL and school capacities as well as their perceptions on both school and OUT support. These variables were further cross-tabulated with data on retention that were obtained from the LTP reports at the end of the first year.

Analysis did not include missing values. However the missing values in this study were negligibly few.

Special note regarding analysis of the open-end question on support needs (question 8): the support needs were grouped according to their themes, which resulted into 10 themes. The themes were treated as variables with categorical responses 'yes' (1) or 'no' (2). Each variable was then analysed from the total number of respondents i.e., 221.

Quality of case studies (Yin, 1994) has been one of the ways in which such approach to research could appeal to levels of validity. Yin attempted to demonstrate how case study researchers could ensure high quality of their studies. He presented four principles: show that the analysis relied on all the relevant evidence; include all major rival interpretations in the analysis; address the most significant aspect of the case study; and use the researcher's prior expert knowledge to further the analysis. Yin (1994) further presented two possible analytic strategies. One is relying on theoretical propositions of the study to analyze the evidence based on those propositions. The other is to provide case description which would be a framework for organising the case study and analysis through objectives of the study as a way of organising the study (Tellis, 1997).

In this study, case description is used whereby each case is presented before making a cross-case analysis. The aim of conducting case studies was to explore good practices on support for school-based DL students. The focus was on 'support' rendered not 'who' supported the DL student teachers. Three main themes regarding support were identified and the organisation of the case study analysis (presented in Chapter Nine) is grounded on the findings, not on literature. Each case data were grouped as being related to contextual and moral support; support for teacher professional development; and support for DL. The information collected through case studies was analysed mainly through these themes.

Data collected through SMS/emails were initially grouped according to the content of the messages, as persisters or dropouts. Data from SMS were usually limited in detail for they only indicated whether or not the respondent was a persister or a dropout. Data from emails were relatively detailed. It is the emails that have mainly been analysed beyond the persister/dropout categorisation. The emails, and in some cases, phone call transcripts, that were made to clarify SMS issues were analysed further to identify reasons for persistence or dropout. SMS and emails were further analysed a way of studying respondents' access and behaviour in use of the technologies.

5.10 *Rigour of the study*

Criteria for judging the rigour of research carried out within the traditional paradigm are well established and include such measures as internal and external validity, reliability and objectivity (Guba and Lincoln, 1989). These criteria are workable because they are grounded in the same worldview of the research itself, claiming, for example, that knowledge about the world exists independent of the observer. The criteria, however, become unworkable when applied to interpretive studies, which are grounded in the belief that multiple meanings of the world are constructed by individuals and where researcher and data are not assumed to be independent. That is, a fundamental problem occurs, when the criteria adopted for judging the quality of the research are based on different philosophical assumptions (Guba and Lincoln 1989).

The standards for 'naturalistic' research proposed by Guba and Lincoln (1989) provide a sound basis for defending non-positivist studies in education in terms of its 'trustworthiness', rather than strict 'validity' (Creswell, 1998). The traditional criteria are replaced by the concepts of 'credibility', 'transferability', dependability' and 'confirmability', which acknowledge the irreducible complexity of an authentic social setting, the multiple perspectives and meanings drawn from the research by individuals using interpretivist methods. A number of other terminologies from researchers have been proposed to be used apart from trustworthiness. They include soundness (Marshall and Rossman, 1989), goodness (Smith and Hershusius, 1986) and triangulation (Tobin and Begley, 2004, Creswell, 2003). The evolution of terminology for non-traditional approaches to research has raised some concerns about the loss of a common language of terminology on rigour of research, such as validity and reliability, but this move is viewed as "placing rigour within the epistemology of their (non-traditional researchers) work and making it more appropriate to their aims" (Tobin and Begley, 2004, p.391).

5.10.1 Credibility

Comparable with internal validity for the traditional positivistic research, credibility addresses the issue of 'fit' between respondents' view and researcher's representation of them; whether the explanation fits the description and whether the description is credible. Lincoln (1995) proposed peer debriefing, prolonged engagement, triangulation, and persistent observation as ways to ensure credibility.

Triangulation: There were two forms of triangulation in this study that contributed to its credibility. Firstly, a variety of data sources was used - survey, interviews, and documents. Secondly, the data depicted perspectives from student teachers, heads of school, educational officer and programme coordinator.

Peer debriefing: This is a "process of exposing oneself to a disinterested peer in a manner paralleling an analytic session and for the purpose of exploring aspects of inquiry that might otherwise remain only implicit within the inquirer's mind" (Lincoln and Guba, 1985, p.308). Peer debriefing was held during research planning, and data analysis, particularly, through peer presentations and discussions at the Graduate School for Social Sciences, (Old Whiteknights House) University of Reading. I had frequent discussions with my study supervisor, a professor of education management, on each of stages of the study.

Prolonged engagement in the field and persistent observation: The field study was relatively short, mainly due to the methodology adopted. The study commenced with a survey whose data collection was done at a meeting centre, not in schools. Questionnaires were analyzed, and informed the case study data collection. After each case study, analysis was done and informed the second case study, and thus informing the next. Despite this constraint, the actual data collection was intense and incorporated persistent observation.

5.10.2 Transferability

Transferability is parallel to external validity and it refers to generalisability from the positivistic studies. Generalisation is possible from qualitative and mixed models because of the replicability of the findings across several populations. Through literal replication (Yin, 2003) - if using the same methods researchers can demonstrate the same findings in several population groups then they can legitimately assert that the findings are generalisable beyond the initial one or two cases. Alternatively, theoretical replication can be used to ascertain generalisability of finding, whether patterns of behaviour are observed across multiple and contrasting objects. Conclusions may be drawn about factors that contribute to those patterns, i.e. how and why the behaviour occurs (Falk and Guenther, 2007).

The transferability criterion is fulfilled in this study mainly through the use of thick description of cases, linking aspects with the findings from the survey. My study findings do not claim to be universal and generalisable but present a report of what particular schools, under particular school leadership, in particular time; play a partnership role in teacher education by distance learning.

5.10.3 Dependability

From a constructivist perspective the traditional reliability criterion for a rigorous study is replaced by dependability (Guba and Lincoln, 1989). Dependability is achieved through a process of auditing i.e.

ensuring that the research process is logical, traceable, and clearly documented in terms of data, methods, decisions and the end product (Tobin and Begley, 2004). The processes followed and decisions made in this study have been made explicit at all stages.

5.10.4 Confirmability

Confirmability is concerned with establishing that data and interpretations of the findings are not a mere product of the researcher's imagination, but are clearly derived from the data. Traditional studies based on the positivistic paradigm seek to achieve objectivity by conducting a study that is neutral, free from bias, value judgements or prejudice. Constraints like these cannot be applied to naturalistic research because the focus is on human beings and they vary in many ways. From a constructivist perspective, objectivity is replaced by confirmability, where the integrity of the findings is imbedded in the data (Guba and Lincoln, 1989). The principle of trackable and consistent research context from which the results are derived is important. This thesis leaves the audit trail.

5.11 *Ethical issues*

Research procedures require some basic ethical and legal considerations. De Vaus (De Vaus, 2001) discusses in detail issues related to seeking voluntary participation; having an informed consent from the respondents; ensuring no harm on the participants as a result of their participation; and abiding by the anonymity and confidentially principle. In an operational context, writers (Burgess, 2001, Oppenheim, 1966) suggest avoiding offending questions or asking for data that is not essential; and in cases where the respondent is being asked to provide personal data (this is the case in this study), there is a need to keep on clarifying why the respondent is being asked to disclose his/her personal data; assuring respondents of confidentiality and most importantly complying with such promises. There is a need to explain what it means by confidentiality by expressing clearly for example that the respondent's identity will not be associated with any publication; understanding the basic requirements of legislations on data protection and human rights particularly on the use of data only for the purposes of the survey; avoiding misleading respondents on the purposes of the survey and the methods of analysis and reporting, as this is a serious ethical issue.

This study was approved by the Institute of Education, University of Reading. Permission to conduct research was provided by the Ministry of Education and Vocational Training in Tanzania who also introduced me to the Regional Educational Office. The Regional Office introduced me to all secondary schools that were to be involved in the study. The OUT office of the Deputy Vice Chancellor (Academic) approved access and use of data on LTP (Appendices 10-14).

Involvement of student teachers and the heads of school were completely voluntary. Initially, student teachers were asked to fill the questionnaire in which they were also asked to volunteer for the following phase. Heads of school were contacted through telephone to ask for their participation. Contact details were obtained from the questionnaires and Regional Educational Office, respectively. They were informed of the continued exchange of information between them and the researcher though e-mails and telephone, and that they were free to opt out at any stage if it was so necessary. The names of the participants and those of the participating schools remain confidential. Indeed the names or other forms of identification of all participants have not been used in any other documents associated with the research. Pseudonyms are used in this thesis to ensure participants' anonymity.

5.12 *Conclusion*

This study on partnership of schools in teacher education by distance learning is based in no one particular method, but is informed by the mixed model approach. Conducted mainly in case studies, the study was informed by a survey results. Aspects of credibility, transferability, dependability and confirmability were applied to data collection and analysis procedures, and findings from this research aim to satisfy these conditions of a rigorous mixed model study.

Chapter Six: Design of the Licensed Teacher Programme

Teachers can make or ruin our society. As a group they have power which is second to none. … It is them, the teachers now at work and now going through Training College, who are shaping what Tanzania will become, much more than we who pass laws, make rules, and make speeches! (Nyerere, 1972)

6.1 *Overview of the chapter*

Chapter six presents LTP design, its specific student support system, implementation of LTP in the first year, and lastly issues related to LTP student retention by the end of the first year. The chapter draws data from interviews with LTP coordinators at OUT and MoEVT, and a review of various documents obtained from MoEVT, OUT and LTP. Issues presented in this chapter refer to LTP population as a whole and sets a scene for a presentation of results on survey sample in Chapter seven, case studies in Chapters Eight and Nine and SMS and emails in Chapter 10.

6.2 *Design of LTP*

6.2.1 LTP student teachers and their entry qualifications

Following the SEDP and rapid increase in secondary schools, the Government of Tanzania made a decision to recruit untrained teachers to work mostly in new secondary schools. According to SEDP document, the use of untrained teachers was meant to be an additional and temporary measure while improving teacher training in universities and teacher colleges. It would take at least three years to have a balance between demand and supply, during the period of three years of expansion of teacher training, between 2005 and 2007; and thus the untrained teachers were to be deployed in schools. Other measures included the use of primary teachers and use of retired teachers.

In 2007 untrained teachers were recruited twice. Batch one was recruited in January while batch two was recruited in June. LTP students were selected from the first batch. The two batches had some differences in their high school performance. Batch one employed about 2200 untrained teachers. The new teachers in batch one were selected among applicants with at least two principal passes in their ACSEE. Unlike many OUT students who have been reported to be of relatively low entry qualifications LTP students were selected in a competitive selection of the best among licensed teachers. Most of them could meet entry qualifications for any university.

Batch two comprising a category of untrained teachers was selected among applicants with at least one principal pass in their ACSEE. In fact, it was getting impossible to get applicants for the teaching job who could meet the two principal passes criterion. Most of the critiques against the use of untrained teachers in Tanzania refer to this category of untrained teachers who were recruited in the second term of 2007, who unfortunately had relatively lower qualifications at ACSEE. Generally however, untrained teachers who were recruited between 2005 and January 2007 had good high school examination results.

Table 6—1 Students in LTP programme by region and degree programme

Region	B.Com (Ed.)	B.Ed.	B.Sc. (Ed.)	BBA (Ed.)	B.A (Ed.)	Total
Arusha	6	34	48	3	48	139
D'Salaam	-	4	4	-	6	14
Dodoma	1	19	28	-	49	97
Iringa	1	15	26	1	80	123
Kagera	1	19	13	3	21	56
Kilimanjaro	8	10	29	5	73	125
Lindi	1	9	7	-	16	33
Manyara	2	25	58	4	52	141
Mara	3	10	27	3	22	65
Mbeya	6	32	20	1	66	125
Morogoro	-	24	19	1	29	73
Mtwara	3	7	6	1	14	42
Mwanza	7	45	25	6	42	125
Pwani	-	19	8	2	10	39
Rukwa	2	49	6	1	24	82
Ruvuma	4	8	5	1	30	48
Shinyanga	1	5	20	-	32	58
Singida	-	7	12	2	8	29
Tabora	-	7	9	-	15	31
Tanga	1	14	20	2	28	65
Total	**47**	**362**	**390**	**35**	**666**	**1500**

The LTP students were supposed to study using DL by which they were registered in various degree programmes. In addition they were provided extended residential training in various teacher colleges, which were to be conducted during the long school holidays in June and December. Table 6-2 shows a distribution of the students in various residential centres.

Table 6—2 Distribution of LTP students in face-to-face centres

Centre	Regions	Total
Butimba	Kagera (56); Mara (65); Mwanza (125); Shinyanga (58)	304
Mpwapwa	Pwani (Coast) (39); Dodoma (97); Dar es Salaam (14); Morogoro (73); Singida (29); Tabora (31); Tanga (65)	348
Kleruu	Iringa (123); Mbeya (125); Rukwa (82)	330
Monduli	Arusha (139); Kilimanjaro (126); Manyara (141)	406
Mtwara	Lindi (33); Mtwara (31); Ruvuma (48)	112
Total		**1500**

6.2.2 Factors related to OUT and the LTP programme

LTP is a programme of study comprising different degree programmes for untrained teachers working in secondary schools. What unifies the different degree programmes is the special support package for the student teachers enrolled under LTP. The programme follows the already available curricula for Education students in all subject teaching faculties and in the Faculty of Education, for pedagogical studies and teaching practice.

Subject knowledge: Three different faculties are involved in the programme and student teachers, are enrolled in the respective faculties where they choose one of the available subject combinations. The faculties are the Faculty of Arts and Social Sciences, providing subject related courses for B.A (Ed.) student teachers; the Faculty of Business Management, providing subject related courses for B.B.A (Ed.) and B.Com.(Ed.) student teachers; and the Faculty of Science, Technology and Environmental Studies, providing subject-related courses for B.Sc. (Ed.) student teachers. The B.Ed. student teachers choose one teaching subject from any of the three faculties, depending on their areas of subject specialisation; as shown in Table 6-3.

Table 6—3 Teaching subject combinations

B.A (Ed.)	**B.Sc. (Ed.)**	**B.B.A (Ed.) /B.Com (Ed.)**	**B.Ed.**
Double economics	Biology and chemistry	Commerce and accountancy	One teaching subject from either B.A (Ed.), B.B.A (Ed.) /B.Com (Ed.), or B.Sc. (Ed.) depending on the student teacher's area of subject speciality.
English Language &linguistics and literature in English	Biology and geography	Commerce and bookkeeping	
English Language & linguistics and philosophy & religious studies	Botany and chemistry	Accountancy and commerce	
Geography and economics	Botany and zoology	Accountancy and economics	
Geography and English Language & linguistics	Double home economics		
Geography and history	Double mathematics		
Geography and Kiswahili	Mathematics and chemistry		
Geography and mathematics	Mathematics and economics		
History and economics	Physics and chemistry		
History and English Language & linguistics	Physics and mathematics		
History and Kiswahili	Zoology and chemistry		
History and literature in English			
History and philosophy & religious studies			
Kiswahili and literature in English			
Kiswahili and philosophy & Religious studies			
Literature in English and Philosophy & religious studies			

Pedagogical knowledge: The Faculty of Education offers courses to students from other faculties who are studying for Bachelor of Arts with Education, B.A. (Ed), Bachelor of Science with Education, B. Sc. (Ed), Bachelor of Commerce with Education, B.Com. (Ed), Bachelor of Business Administration with Education, B.B.A. (Ed.). The courses are organised in three parts. Part One courses give students the foundations on which education is built - history, philosophy, psychology and sociology. Part Two

courses provide the student with knowledge and skills for handling teaching and learning in different situations. Part Three courses broaden students' knowledge of different aspects of education, including specialisations. The course requirements for these degree programmes are shown in Table 6-4 below.

Table 6—4 Units completion requirement for Education students

Programme	Education	Major subject	Minor subject	Total Units
BA (Ed)	19	16	8	43
BBA (Ed)	16	29	-	45
B Com (Ed)	16	29	-	45
B Sc (Ed)	16	20	12	48
B Ed	27	16	-	43

Teaching practice: Teaching practice for LTP student teachers was scheduled to take place at the end of the first year and at the end of second year. It was to take place in some university identified schools, not in the student teachers' work schools. As such LTP student teachers were required to relocate temporarily to those TP schools which were in urban areas.

6.2.3 Teacher training issues in the design of LTP

Why LTP? When I asked the OUT management for permission to conduct this study, I was given a go ahead, but with a caution;

> *You are permitted to access to the said data, however I may comment on the suitability of the case study for PhD research. This is just an initiative aimed to see if it is feasible to make mass production of teachers. So far the Ministry of Education and Vocational Training has not released a second batch for enrolment (Open University of Tanzania, 2008).*

When I interviewed the programme coordinator at the Ministry, I was given a rather different reason for having LTP. The coordinator revealed that LTP was designed to address issues of school-based teacher education and that right from the induction programme, the new untrained teachers were introduced to teaching using a learner-centred approach that could be internalized by the student teachers through a school-based teacher education approach. Evidence could be identified from the induction guidelines and modules used. Particularly, the *Facilitator and Mentor Guide* (United Republic of Tanzania, 2004a, p.1) read:

> *To cope with the rapid expansion provided in the (SEDP) plan the Government has decided to recruit form six leavers and licensed graduates to teach in secondary schools. The Government however deems it necessary to expose the new recruits to a short induction course before they are sent to the schools. The recruitment of new teachers takes place at a time when reforms in*

pedagogy form the thrust of the (SEDP) plan. The induction programme has therefore taken into consideration the aspects of learner centred active and participatory approaches emphasized in the plan.

The issue of not enrolling a second batch was made clear by the Ministry coordinator who revealed that LTP did not take more students into the programme because it was important to study completion rates of the first batch of students; but added that the Ministry had been enduring all sorts of disapprovals from the public on the use of untrained teachers in schools;

We have had people writing in newspapers showing that the Ministry has no strategy for teacher training and recruitment. We may lack control of demand and supply at times of massive expansion, but most of them do not have any idea on how suitable school-based teacher training is, particularly for the beginning teachers.

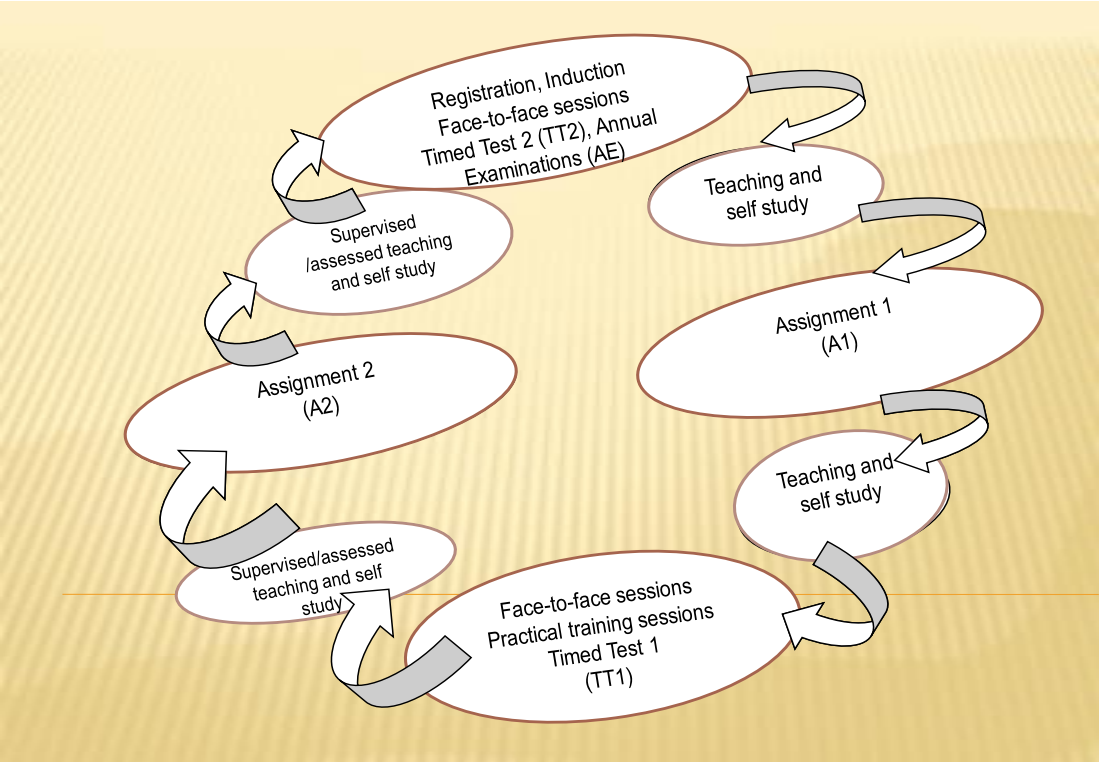
There are at least two key issues to note here. The first regards existence of different (or even opposing) perspectives on the aim of school-based teacher education in general and LTP in particular. While MoEVT appear to embrace ideas on SBTE, the same is not the case for training institutions. It would appear that the gap in understanding and appreciation of SBTE could be a result of current inexistence of a coherent policy on SBTE. It could also be noted that while the MoEVT has had resources to commission studies on teacher development, usually by deploying western researchers, it has failed to integrate the findings of such studies in to the practice of local training institutions.

The second issue is the public disapproval of untrained teachers. It appears that the Ministry by stopping further implementation of LTP was influenced by public disapproval on letting untrained teachers continue teaching in schools, despite the fact that the Ministry strongly believed that school-based training was the suitable model. The public would wish to see teachers trained first (in colleges and universities) before being deployed in schools. It is apparent however that there is confusion between having untrained teachers in schools and having school-based initial teacher training. In some cases, the confusion is even more serious especially when some well-known universities in country tend not to recognise a school-based diploma (offered by the MoEVT teachers' colleges) as a legitimate entry qualification for a bachelor degree.

LTP time frame: LTP was scheduled to take three years from January 2007 to December 2009. The duration was obviously very ambitiously set. The normal DL programmes at OUT take a total of six years to complete, as they are usually studied on a part-time basis. LTP therefore had a full-time framework meaning that student teachers were to study full-time. But that was in practice unrealistic because all LTP student teachers were working full-time as teachers. Figure 6-1 shows that LTP

students had a very tight schedule usually having to struggle working in schools, studying and writing assignments, and travelling to and from regional centres for library and internet services and travelling to local collages for residential courses and for doing examinations.

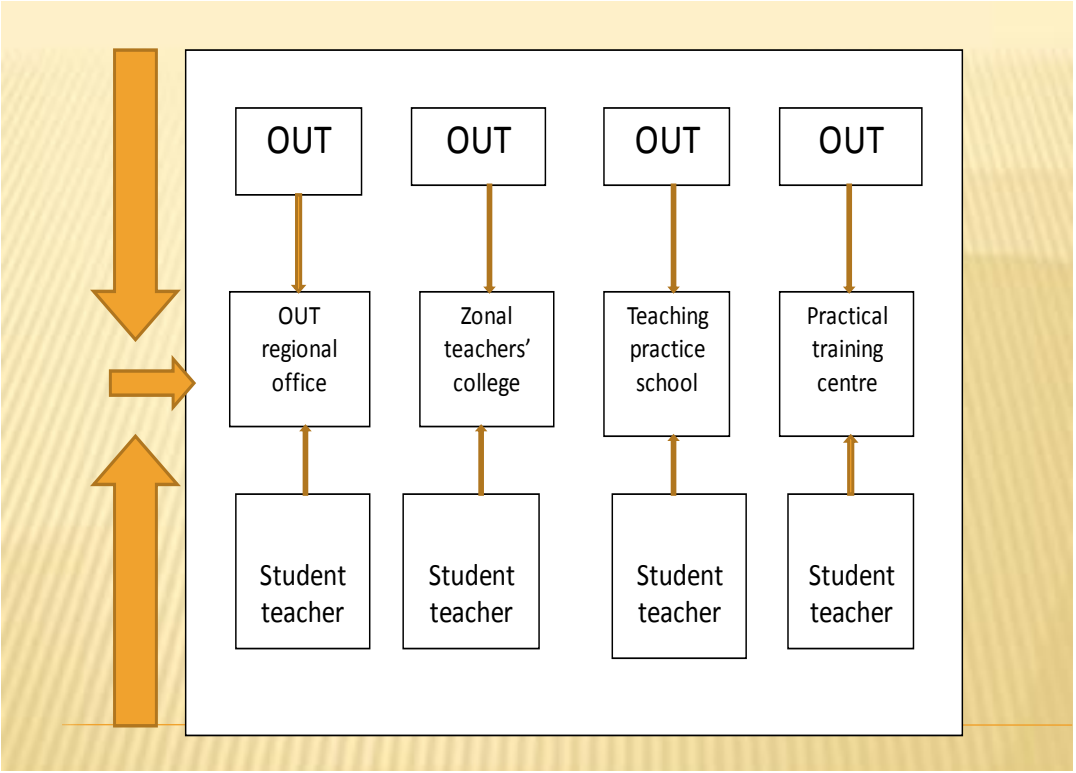
Figure 6—1: Year-long study cycle for LTP students



The teaching-learning process in LTP: Implementation of LTP involved several places where the student teachers had facilities to support their studies. Figure 6-2 presents a diagram, referred to as *the meeting point* model of service delivery to distance learning. The LTP student had to be provided with support services not at his/her school of work but elsewhere; a place where the student teacher could be provided with administrative support services was the regional centre; OUT could conduct face-to-face tutorials in local teacher colleges; OUT tutors were to conduct TP assessments only at some earmarked schools, not at the workplace; and equally so were meetings for science practical training sessions. The *meeting point model* could be of great use in terms of creating opportunities for face-to-face contact between students and university tutors and contact among students themselves, as well as creating opportunity for a system-wide approach to student support; although at the same time it could be more costly, on the side of the student. In terms of learning how to teach the *meeting point model* would ignore teaching activities that are constantly taking place at the workplace. Although initial

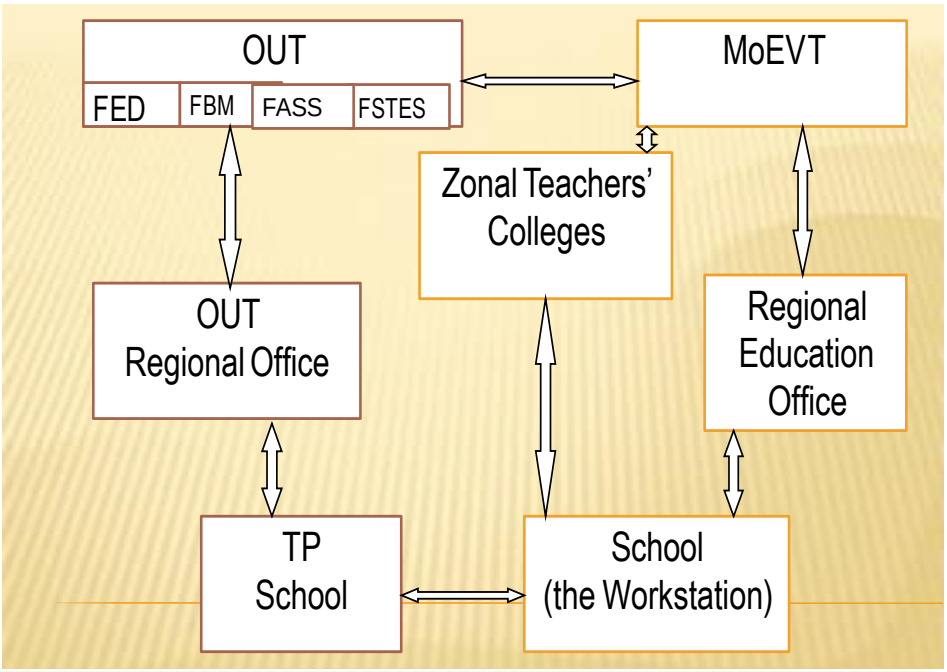
planning of the programme included mentoring as a strategy for school support, the use of the *meeting point model* appears to have ignored school-based support.

Figure 6—2 *The meeting point model* of student support delivery



The implementation of LTP: The LTP design is basically a special service delivery to students. The idea of LTP is to make use of existing education degree programmes in various faculties at OUT but provide special support to the licensed teachers so that they can complete their course in a considerably shorter period than it would otherwise take. While the LTP student teachers receive print materials for self study like other OUT students in the mainstream, they have to attend longer face-to-face sessions in which they have lecture series and discussions, as well as submit written assignments, do tests and examinations. The sessions are prolonged for OUT tutors to mark the assignments, tests and examinations, and compile results for dissemination (LTP reports, 2007). Figure 6-3 shows how LTP took advantage of the available facilities at OUT as well as MoEVT.

Figure 6—3 Organisational structure of LTP



Key

FED	Faculty of Education
FBM	Faculty of Business Management
FASS	Faculty of Arts and Social Sciences
FSTES	Faculty of Science, Technology and Environmental Studies

Face-to-face sessions' reports reveal that improvement in intensiveness of the face-to-face sessions was made after the experience in the first year. The first meeting took three weeks in which students were able to attend lectures and discussions only. Tests and examinations were to be taken in the mainstream setting. Apparently feedback delays and loss of student data were experienced.

The partners involved in LTP: LTP is different from other OUT programmes due to several reasons ranging from the nature of students; teaching and learning style, and the nature of financing and reporting. Unlike most OUT students who are mainly mature, most LTP students were enrolled as direct high school leavers. While most OUT students have to undergo some bridging courses to be able to qualify for degree studies, LTP were from among the best licensed teachers employed in the year 2007. In fact many of them had applied and qualified to enrol in other public and private universities in the country. The LTP model requires a partnership strategy between all parties involved in the programme. Table 6-5 shows responsibilities by three main partners: the Ministry of Education and Vocational Training, OUT, and the student teachers.

Table 6—5 LTP partners

Partner	Responsibilities
MoEVT	submit LT particulars for selection by OUT review admission list received from OUT communicate with OUT on LTP face-to-face venues pay for LT food and accommodation during face-face sessions pay tuition fee to OUT, and book and stationery allowances to LT students pay for LT student costs incurred during practical training, if the training is conducted away from the student's workplace communicate to LT students on matters of urgency
OUT	enrol the LTs in accordance with OUT admission regulations communicate with MoEVT before release of the names announce the names of admitted LTP students prepare and distribute study materials conduct face to face sessions report to MoEVT on LT student progress ensure student credibility throughout the programme report to MoEVT on LTP students student completion within three years submit financial report to MoEVT on all the funds paid to OUT.
LTP students	attend face-to-face sessions prove credibility pay for registration incur transport costs to and from face-to-face sessions and practical teaching exhibit teacher ethics during face-to-face and practical training sessions prove presence at one's workplace ensure all correspondence is made through the Head of School

Source: United Republic of Tanzania (2007a)

Other partners in LTP: The implementation of the programme at least the initial level, revealed a need for involvement of more partners in this programme. Some principals of the teacher colleges were not aware of their responsibilities in this programme. The LTP report (June, 2008) reveals that in some colleges responsibilities for the College Administration were not clear even though they had a circular letter from the Ministry which clarified their responsibilities. In the daily life of a teacher college (for diploma and certificate teachers) cleanliness of dormitories, classrooms and dining halls is the responsibility of student teachers. Licensed teacher students, regarding themselves as higher degree students, were not willing to do the same, thus forcing coordinators to employ people to do the cleaning of classrooms and offices they were using. In one of the colleges it was reported that the principal asked the OUT coordinator to pay charges of sanitation system maintenance.

In some other teacher colleges, students were denied access to essential study facilities. In the LTP report (June, 2008) it is reported that computer and internet services were the main problem during the

June session in some centres. In two different colleges the principals were reluctant to allow use of the facility. In another college power was disconnection because of an unpaid bill.

At another significant level, the cooperation of school heads seems to have been taken for granted by the planners of LTP. Reports of LTP (April, 2007) revealed that some school heads were not aware of the programme and were not willing to let LTP students leave for face-to-face meetings. While school support could be developed to the advantage of the programme, this appears not to have been planned in the designing of the programme. The usual school-based support in the OUT teacher education model is that of having the school head to do assessment of OUT students during the second year of study (or second sub-year for those studying full-time).

Three school-based support issues are problematic with regard to LTP. One is the nature of schools in which the LTP students find themselves working. OUT accepts heads of schools who have at least a bachelor degree in education to be school-based assessors. This condition does isolate most of the rural secondary schools where heads of school are diploma holders. For those schools without a graduate head it is the role of a nearby school head or cooperating tutor. Cooperating tutors are themselves graduate teachers identified by OUT to assist in conducting face-to-face sessions and doing assessment.

The second issue regards the teaching practice (TP) schools. It is the argument of this thesis that school-based support could be more appropriate than the TP model. Understandably, however, the nature of most schools in the rural areas cannot allow school-based support. LTP seems to have adopted the normal OUT's TP design in which some urban schools are identified for student teachers to conduct their teaching practice. Students have to move from their workplace and families for weeks for TP. They find themselves over-crowded at a school struggling to get assessed by a roving assessor from OUT headquarters or a local cooperating tutor. Communication with LTP students revealed that most schools were reluctant to accept LTP teachers to do their TP. Some schools were closed during much of the LTP teaching practice period. As a result most LTP students did not get assessed to the required number i.e. at least four times.

The third issue is difficulties in formalising school mentors for new teachers. In the licensed teachers' induction guides, it was made clear that mentoring of the new teachers would be a responsibility of some roving mentors who would be going around the schools. Probably this was a considered plan due to the realities of schools in rural areas. However, this plan was later abandoned due to some financial

reasons. The alternative was for each school to have a school mentor. The coordinator of the programme at the MoEVT confirmed that schools had to select one experienced teacher to get on-the-job training as a mentor and work with the new teachers. It was apparent however that there was no ministerial support in training of the school mentors.

The idea of posting students involved in the LTP to certain remote schools which appear to have adverse impact on DL studies could be rectified if regional educational officers involved in allocating schools to new teachers were involved in the design stage of the programme. According to an interview with one regional education officer, the regional officers, who have a mandate to allocate new teachers to schools in their respective regions, were not provided with guidelines on how to allocate workstations to the licensed teachers. The SEDP document on teacher allocation (United Republic of Tanzania, 2004b) did not specify the posting and workload of the untrained teachers. In principle, they could work out a transfer option for those LTP students who happen to be in remote schools. They could also see into the possibility of sending LTP students to clustered schools making it possible for the students to form study groups.

The cost aspect of the programme: LTP was meant to be as cost-effective as possible that is maximising effectiveness of the training programme in terms of producing well qualified teachers at the minimum cost and shortest period possible. Efforts to use available curricula and physical facilities seem to have worked. The use of TP model for student support and school-based support was also justified in financial terms; that the ministry lacked funds to implement mentoring and that OUT could only afford to send TP supervisors to urban areas. However to the student teacher, the cost minimisation strategy meant more financial pressure. Table 6-6 shows a summary of issues and cost implications.

Table 6—6 LTP cost items

Cost barer	Cost item
Sponsor	Tuition fee Books and stationary allowances TP relocation allowances Face-to-face food and accommodation Face-to-face venues
OUT	Costs for production and distribution of materials Costs for face-to-face preparations, travel costs and allowances for tutors Travel and allowances for TP supervisors Costs for Science practical training in other institutions
Student teacher	Registration fees Travel, meal and accommodation when visiting regional centre for services Costs of travel when attending other meetings outside to official LTP face-to-face meetings Other costs not covered by the sponsor e.g., costs on communication, including SMS and phone calls, and mobile internet and internet cafe charges

6.3 *Student retention in the Licensed Teachers Programme*

This section presents some issues related to aspects of student progress over the first year of LTP implementation. The issues reported are participation in face-to-face meetings, attendance in examination venues and registration in to second year of study.

Participation in face-to-face sessions: In 2007 LTP students had two face to face meetings. In April, they had their first one that followed enrolment in January. One would have expected that attendance would be at the best levels. At least it could be thought as being too early to treat non-attendance as dropout at that point. Any optimistic programme manager would not have thought any dropout had already occurred within three months.

The fact however is that 27% of LTP students could not attend the sessions in April. Different reasons were provided for that. The LTP report (2007) associated this experience with late information on the face-to-face meeting. As such some students could not haphazardly prepare themselves for the journey. In addition, the report goes on, some heads of school demanded official letters from students to be able to allow them to leave for studies, which they did not have.

The November-December meeting had a lower attendance - as low as 46.4%. The coordinator's report on the matter mentions student dropout as the main reason for poor attendance. However, according to the report, there were still some students who could not attend the face to face sessions due to various social and financial problems. Students seem to have experienced financial difficulties. For example,

Eastern Zone students had to travel all the way from remote areas of the Coast region, such as Mafia Islands, to Mpwapwa College in central part of the country. It is during this second meeting that the Eastern Zone's college, Morogoro, was no longer accessible for use by LTP students.

The attendance level at the second meeting in November 2007 seems to have been maintained during the third meeting in June 2008 with almost exact same number of attendance (Table 6-7). There are two ways this has been explained in LTP reports and other writings. The first is that during this particular meeting students were expecting to be paid their allowances, including some previous ones, for stationery and teaching practice subsistence. This could be justified by a report that most students arrived late at the meetings after being tipped by their friends that the allowances were actually being paid. The second is an explanation more theoretical and speculative; that those students, who had eventually survived the first year of study and registered for the second year, were actually committed to OUT studies. As such a similar attendance could be expected to repeat throughout the rest of the second and third year of study.

Table 6—7: Attendance by face-to-face centre

	Butimba	Kleruu	Marangu/ Monduli	Mpwapwa	Morogroro/ Mtwara	Total	%
Face-to-face 1	156	223	432	150	135	1096	73.0
Face-to-face 2	113	170	221	151	41	696	46.4
Face-to-face 3	107	162	207	194	24	694	46.3

Performance in assignments, tests and examinations: The issue of performance in assignments, tests and exams is even more difficult. Data on results for assignments, tests and examinations were not consolidated in one database. The idea of marking assignments, tests and examinations at the face-to-face centre did speed up the pace at which feedback has been provided in the past. However this practice started at the last meeting of 2007. Results for assignment One and Test One for all courses done by LTP students in 2007 were all mixed up with the rest of students in respective faculties. A report on the June 2008 face-to-face meeting had this to say:

> *All assignments and tests that were submitted/done during face-to-face session were marked and processed into excel documents ready for importation to SARIS. However, a significant number of students did and submitted their assignments and tests in the main stream, full report of their progress will be known after marking and recording the main stream assignment and test scripts in September 2008. The records of marked assignments and tests have been submitted in soft copy from all five centres. They are now being compiled into one results document.*

Faculties have been requested to track all results for licensed teachers from the mainstream records so that a complete record of MoEVT sponsored licensed teacher students performance in year one and two is obtained.

However, there are some students in this programme who, for unknown reasons, haven't finished doing tests and examinations for the Year One courses. Despite the fact that they were allowed to follow all uncompleted tasks in the main stream examination session of February 2008, some didn't do so. Data is being collected to see the magnitude of this problem and suggest solution.

Some students are still missing tests and examinations of 100 series. This is more significant to clustered courses in which some of former 200 series have been moved to 100 series. Special tests examinations should be arranged. Another reason is that some students didn't sit for timed tests and examinations of 100 series in December 2007 because of boycotting classes (the case of Mpwapwa) and not attending the session. Some claiming they have attempted the same in the main stream while they haven't. As the last resort, the University has to see if it is possible to have special TTs and examinations for 100 series in November during the Masters' programmes examinations. An alternative is to allow them to fill the gaps during TT and Examination session of the main stream in February 2009 although this will be too late.

With compilation of results for each student in this programme, it is possible to have a picture on the progress of students. Therefore, the students' progress report and recommendations to students and the sponsor (i.e., MoEVT) on the possibility of completing studies in three years will be given after the exercise of results compilation is completed in September 2008 (LTP Report, 2008).

Table 6—8: Student performance in education courses in 2007 (LTP in brackets)

Course	Total Number	A-C Grade	D-E Grade	Incomplete
OED 101	1358	178 (7)	18 (2)	1121 (710)
OED 102	1057	253	16	788 (538)
OED 103	1893	216 (1)	43 (1)	1634 (1153)
OED 104	1501	184 (3)	16 (2)	1301 (700)
OED 105	680	264	11	405 (187)
OED 106	1078	203	1	874 (482)
OED 107	1419	314 (7)	10	1095 (599)

Although the performance level of students is not captured by the rather incomplete compilation of results (Table 6-7), we could get a rough picture of students attending at examination rooms. First year students, regardless of their faculties, were required to register in courses OED 101 (History of Education), OED 102 (Philosophy of Education) and OED 103 (General Psychology) (FED, 2007). They could take additional courses if they felt they had the capability to do so. Otherwise the rest of the courses in Education could be studied in second year. According to these results (obtained only from the Faculty of Education), the highest number of LTP students attempting assignments, tests and

examinations (although with an incomplete compilation of results) is 1155 out of 1500, which was in the course OED 103. By interpretation, at least about 350 LTP students never attempted any assignment, test or examination in first year of study. They may have dropped out of the programme before even the deadline on submission of the first assignment.

Second year registration: Registration in the second year of study could be the best way of determining retention. It appears that all LTP students still working in schools were granted financial assistance for year two of their study regardless of their academic progress. In other words first year academic performance was not considered when registering for studies in year two. Year two registration stands at 845 students indicating that the programme has managed to retain about 56%. Table 6-8 shows retention in different degree programmes. The problem with assuming presence at workplace as equivalent to persistence in OUT studies fails to detect students who may have dropped out and those who may not be actively involved in OUT studies.

Table 6—9 LTP student retention at second year registration

Programme	Year 1 Registration	Year 2 Registration	Retention (%)
B.A (Ed.)	666	407	61
B.B.A. (Ed.)/ B.Com. (Ed.)	84	46	55
B.Ed.	360	181	50
B.Sc. (Ed.)	390	211	54
Total	**1500**	**845**	**56**

6.4 *Conclusion*

LTP students are different from most of the rest OUT students in that they are mostly school leavers, with academic qualification acceptable at any other university. They have all the academic future open for them to wonder and explore. For this kind of students it may not be inactiveness when they do not attend face-to-face sessions, or when they stop sending assignments and attending examination rooms. It is likely that they have dropped out of the programme. Chapter Six has provided the design of LTP as a model of teacher training during a high demand for teachers, its first year implementation and its implications on student retention. Chapter Seven will explore in depth more personal, institutional, and school factors that could be associated with student progress and retention, by reporting analyses of a sample of LTP students, as previously described in Chapter Five (Research Methodology).

Chapter Seven: Analysis and Presentation of Survey Data

You could help me complete the units I have registered for in 2007 by getting me a transfer to a place where I can travel more easily in search for internet services, also to be able to discuss with my fellow students. In my current place there is no good transport, I'm alone – nobody to discuss with (LTP Student Survey respondent, April, 2007).

7.1 *Overview of the chapter*

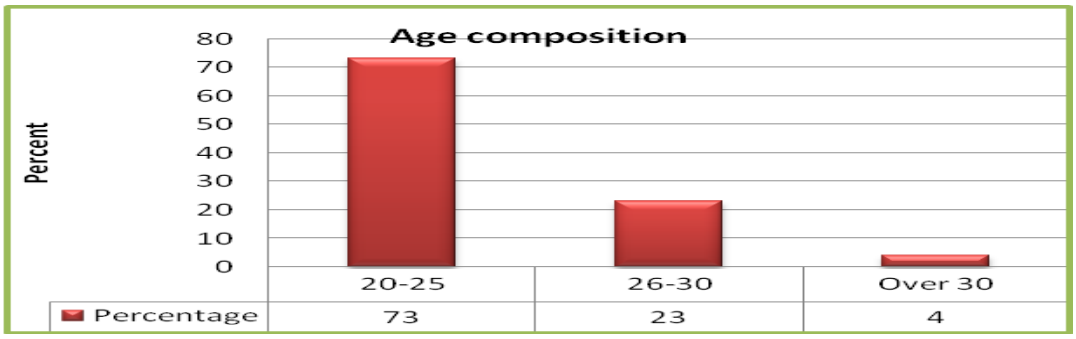
This study was conducted in order to explore issues related to support of DL students who are based in secondary schools and to explain the impact of such support on retention of the students. As such, the study employed both quantitative and qualitative techniques in a mixed model approach. In chapter Six, general overview of LTP is presented. It consisted of demographics, programme planning and first year implementation; and provide a prelude to the succeeding analyses of the study sample. Chapter Seven is dedicated to analysis and presentation of survey data collected from questionnaires filled by the LTP student teachers of the OUT. It presents findings related to the demographic and attitudinal data of the students, perceived support needs and an evaluation of the actual support rendered.

7.2 *Personal and background factors of the LTP student teachers*

7.2.1 Age

Respondents of the questionnaire were 221 in total, and the 20-25 age group, which comprised 73% of the sample, was the dominant group. This reflected the typical nature of the LTP students who mostly happen to be high school leavers. Otherwise this characterisation of respondents may differ significantly from the typical age composition of the rest of OUT students who are of a more mature age. Other respondents were in the age group 26-30 (23%) and above 30 (4%), as shown in Figure 7-1.

Figure 7—1: Age composition of the respondents

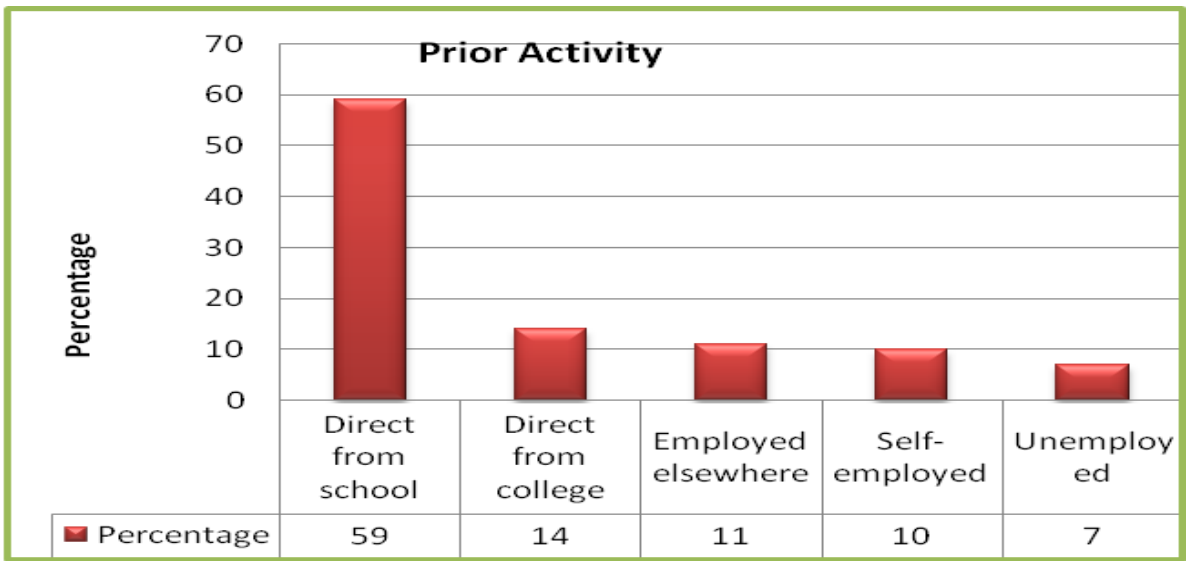


n=221

7.2.2 Prior activity

Respondents were asked to indicate their activities immediately before joining teaching in order to capture information about their experiences in DL and teaching-related activities. Results, as presented in Figure 7-2, confirmed the dominance of those student teachers who are direct from secondary school. Interestingly, if percentages for the students who are direct from secondary school and that of those direct from college are added together, the total (73%) matches with the percentage of the respondents in the age group 20-25. The direct from college respondents were those beginning teachers who, after ordinary level secondary education, went through the technical college option instead of the normal advanced level secondary education. The females (67%) were more likely to be direct from secondary school than were the males (54%). Other prior activities included employed elsewhere (11%), self-employed (10%) and unemployed (7%).

Figure 7—2: Respondents' prior activities

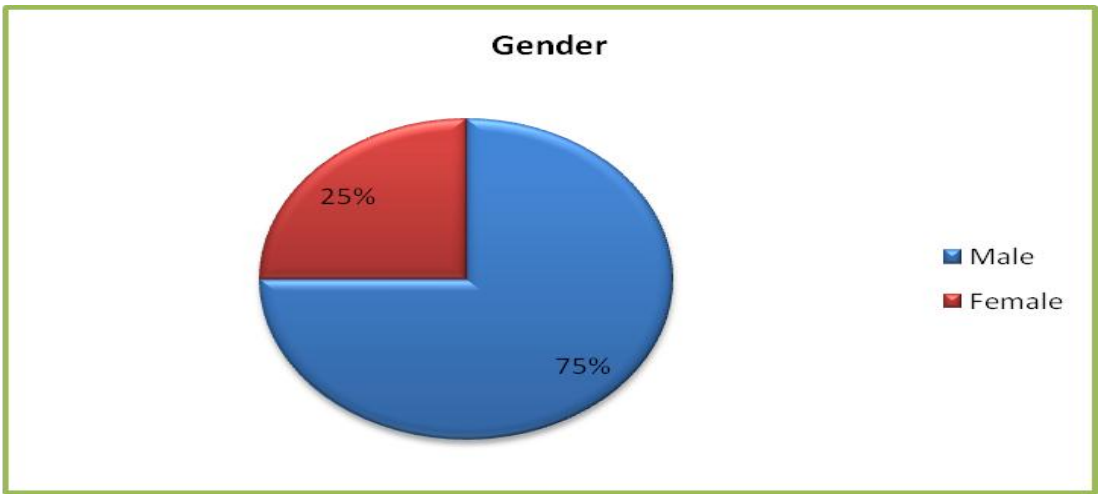


n=221

7.2.3 Gender

Analysis revealed dominance of male respondents. As presented in Figure 7.3, male respondents made up 75%. The results do not however explain the gender disparity in absence of other sources of information. It is not clear for example whether the disparity was a result of male dominance in higher education. Otherwise, as presented in 7.2.5.and 7.2.6 below, both, attitude on the teaching job and attitude on DL are not affected by gender.

Figure 7—3: Composition of respondents by gender

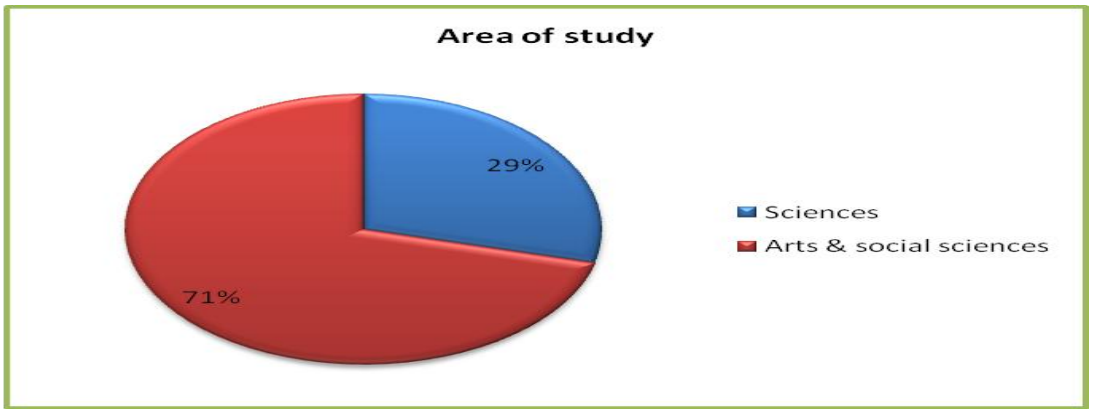


n=221

7.2.4 Area of study

Most respondents indicated that their areas of study were in the arts and social sciences (71%). The other category, science, was represented by only 29%. Both male and female students tended to concentrate heavily in the arts and social science subjects. However, comparatively, males were more represented in science subjects than were females. The representation for males was 31%, compared to 22% for females.

Figure 7—4 Respondents' areas of study



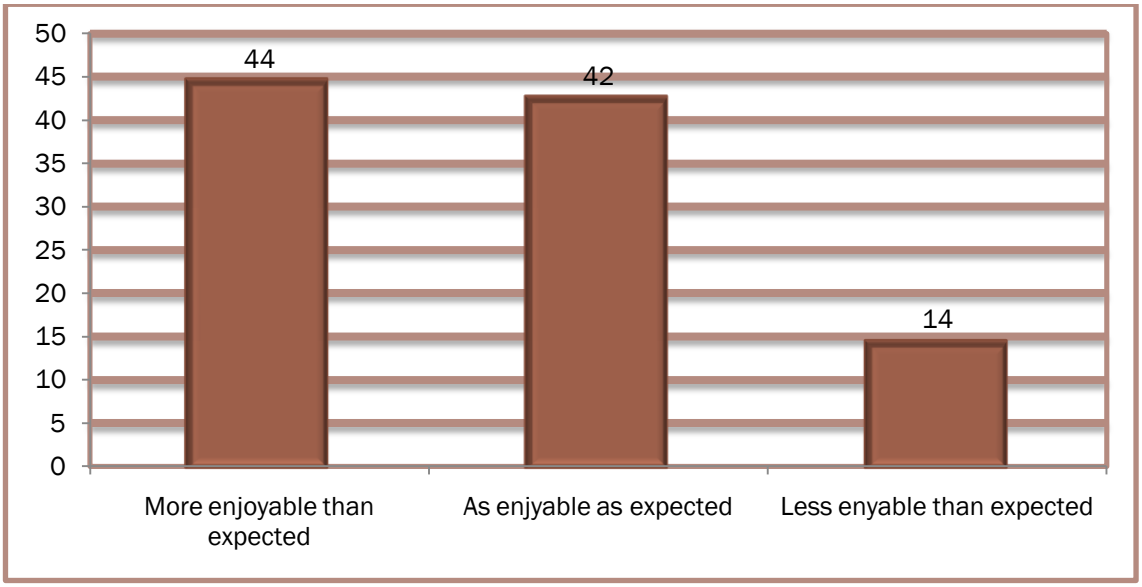
n=221

7.2.5 Attitude on teaching

Respondents were asked to express how they felt working as teachers. It was assumed that attitude on teaching might have an influence on retention in a teacher training programme, and that before joining teaching the beginning teachers, in this case the DL student teachers, had their own views on teaching.

They were asked to tick one of three options regarding the teaching job: *more enjoyable than expected, as enjoyable as expected,* and *less enjoyable than expected*. About 44% felt teaching was more enjoyable than expected (Figure 7:5). About the same percentage (42%) felt teaching was as enjoyable as expected. A sizable group of 14% however felt teaching was less enjoyable than expected.

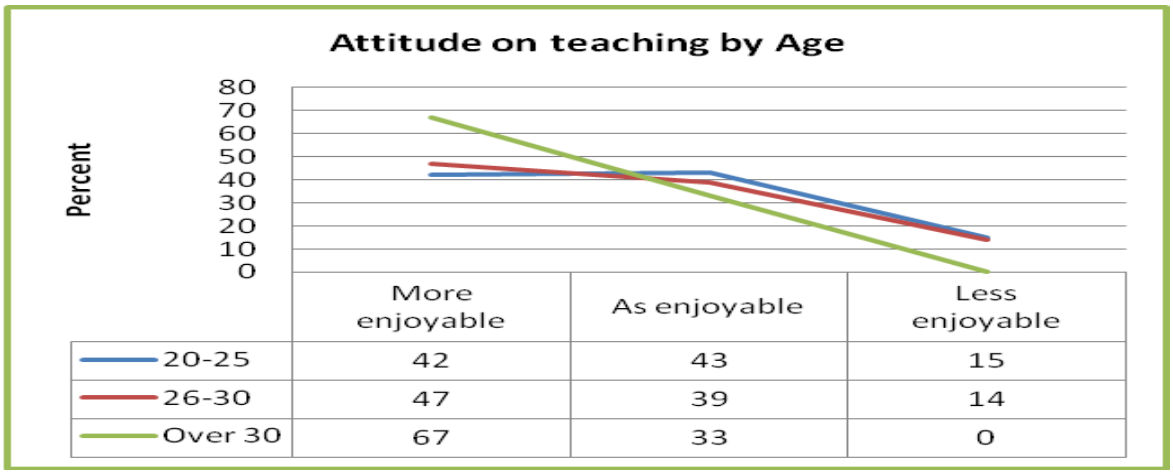
Figure 7—5: Respondents' attitude on teaching



n=221

Attitude on teaching when cross tabulated with age showed that 20-25 age group had the lowest rate of satisfaction with teaching while the over 30 group had the highest. Figure 7:6 shows that satisfaction with teaching increases with age, beginning with 42% for the 20-25 age group, then 47% for the 26-30 group and finally 67% for the over 30 group. A lower age group is more likely to find teaching a less enjoyable job. Findings show that the percentage of student teachers who find teaching *less enjoyable than expected* dropped among the three age groups from 14% (20-25) to 12%(26-30) and then to 0% (over 30).

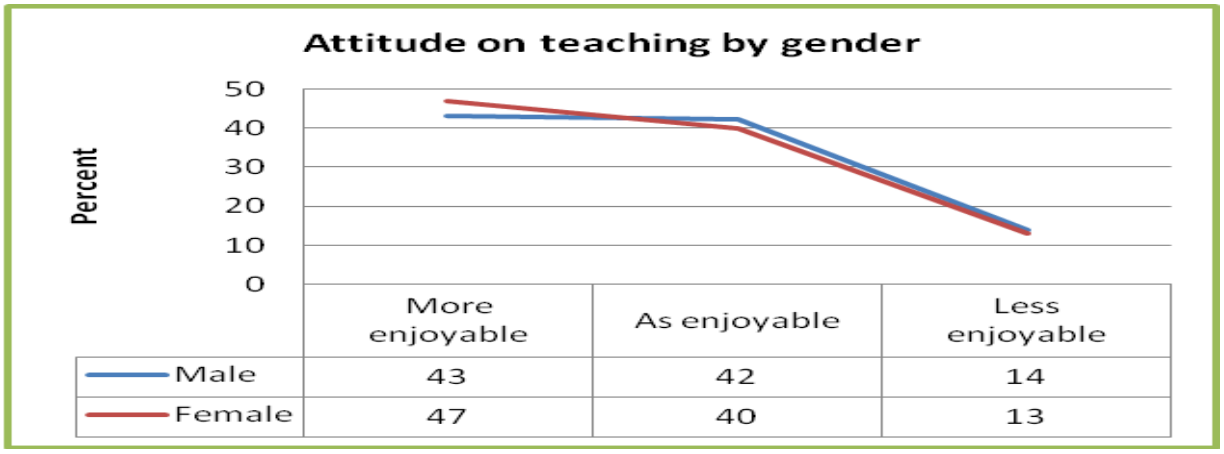
Figure 7—6 Attitude on teaching by age



n=221

Slightly more female students found teaching *more enjoyable than expected* than did male respondents (Figure 7:7). While 43% male found it more enjoyable, 47% female felt the same. Similarly, female respondents had a slightly less percentage of those finding teaching less enjoyable (13%), compared to 14% for males.

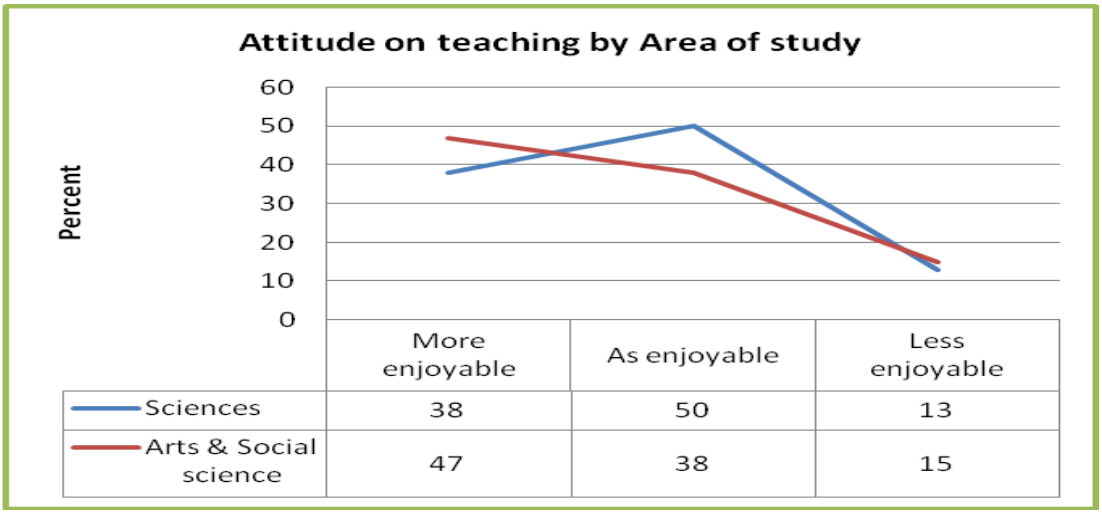
Figure 7—7 Attitude on teaching by gender



n=221

Figure 7-8 shows that respondents from arts and social sciences who found teaching more enjoyable (47%) were more than those from science subjects (38%).

Figure 7—8 Attitude on teaching by area of study



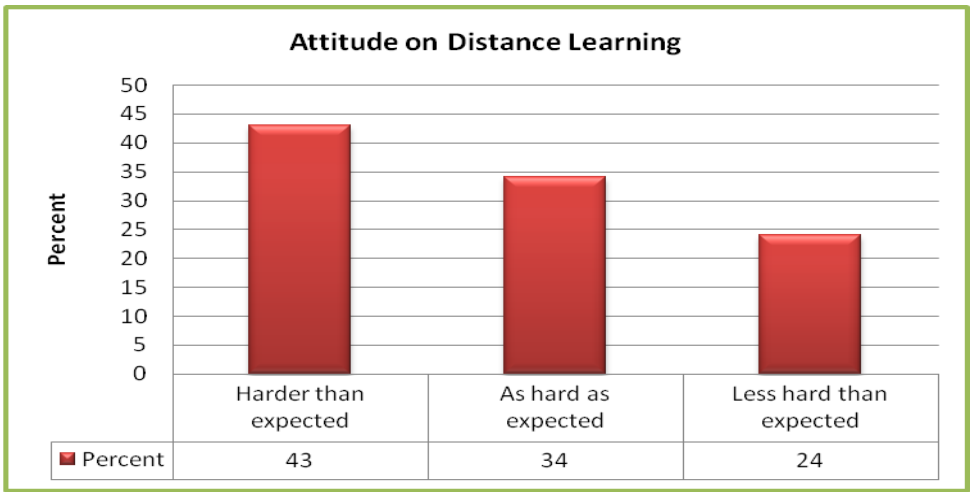
n=221

Analysis of data on attitude on teaching and type of school was performed. However this might have been affected by the fact that the number of respondents from high schools was only small. The number of respondents working in high schools was 12 out of the total sample of 221 (5.4%). The fact that high schools were underrepresented in the study presents the typical nature of work environment of licensed teachers – mostly posted to new rural community schools. Respondents from high schools who found teaching more enjoyable formed 58% outnumbering those in ordinary schools who were at 44%. This suggests that students who were posted to high schools were more enthusiastic about teaching, at least with the first impression of the school environment, given that high schools are relatively well resourced. However, as reported in the following chapters, particularly Chapter 10, high schools appear to be more ineffective in retaining licensed teachers than ordinary secondary schools.

7.2.6 Attitude on distance learning

Respondents were further asked to express their feelings about their experiences in DL, with view to capturing association of such feelings with persistence in the programme. Most respondents (43%) reported to have found studying at a distance *harder than expected*. About 34% reported to had found DL *as hard as expected*. Only 24% of the respondents reported that they had found DL *less hard than expected*.

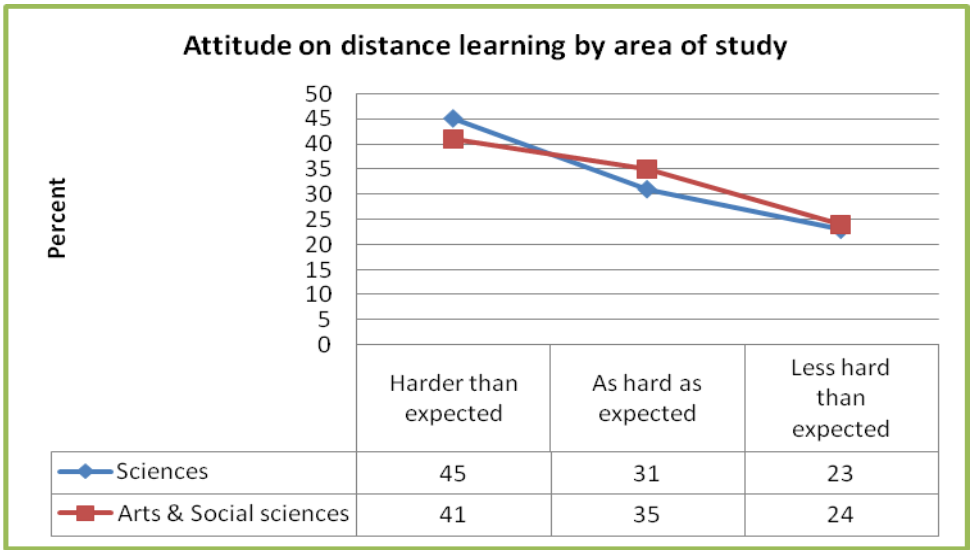
Figure 7—9: Attitude on distance learning



n=221

Slightly more science students (45%) found DL *harder than expected* compared to 41% respondents from arts and social sciences (Figure 7-10).

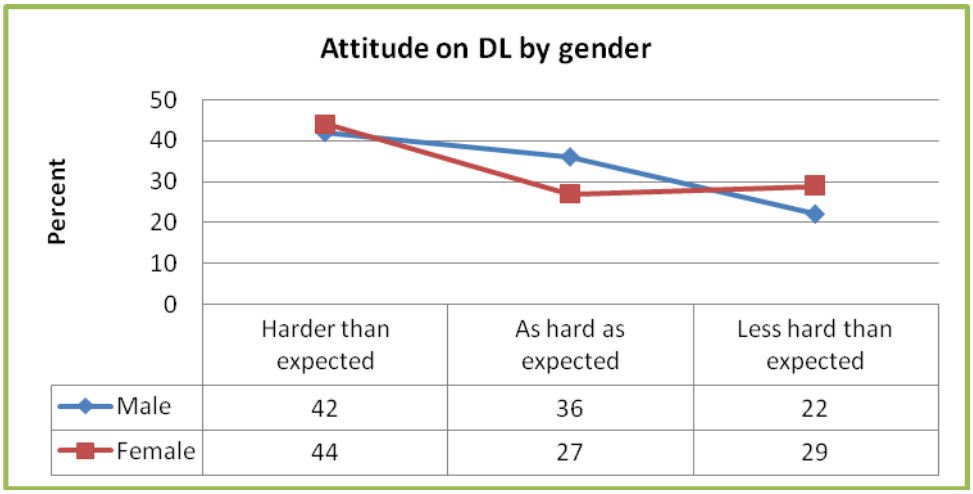
Figure 7—10 Attitude on DL by area of study



n=221

Analysed from the perspective of gender, responses showed some mixed results. While slightly more female (44%) reported finding DL *harder than expected*, compared to 43% of male, more female (29%) found DL *less hard than expected*, when compared to 22% male (Figure7:11).

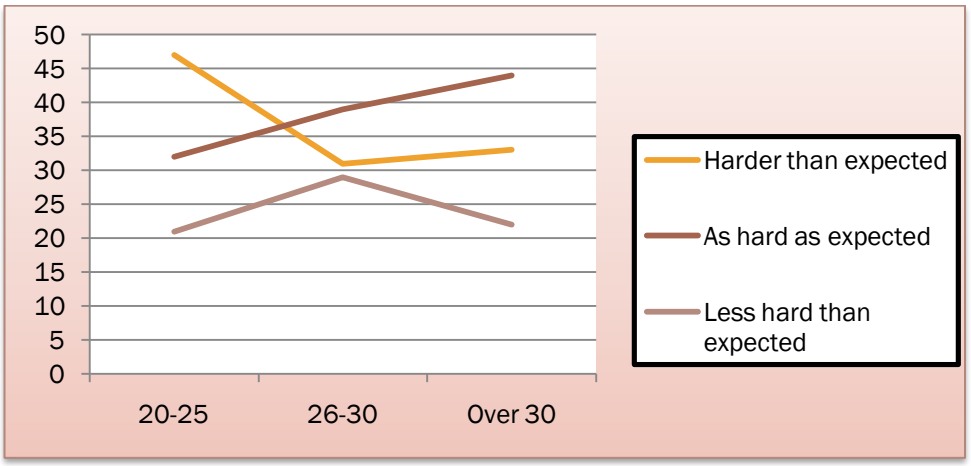
Figure 7—11 Attitude on DL by gender



n = 221

The lower the age group the harder it feels to study by the DL mode (Figure 7-12). Among the 20-25 age group, 47% had realized that studying through the DL was actually harder than they had initially expected. The percentage however dropped to 31% for the 26-30 and 33% to the over 30 age groups. The findings further reveal that the higher the age group the more realistic it becomes when making assumptions about studying by DL. While 32% of the 20-25 age group had realized that studying through DL was *as hard as they had expected*, the percentage increased to 39% and 44% for the 26-30 and over 30 age groups, respectively.

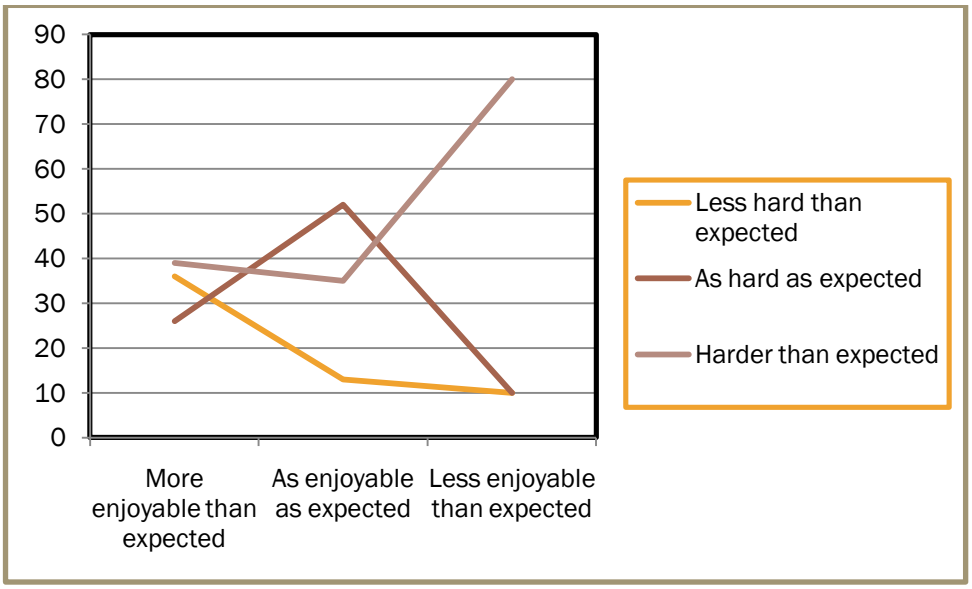
Figure 7—12 Attitude on DL by age



n=221

Attitude on DL and attitude on teaching (Figure 7-13) are variables with a high correlation. Respondents who perceived DL as harder than expected, they also perceived teaching as less enjoyable than expected. Although the findings do not suggest any causality between the two variables, the relationship could point to a more complicated phenomenon when aspects of teaching as a job are combined with DL as a mode of study.

Figure 7—13 Attitude on DL by attitude on teaching

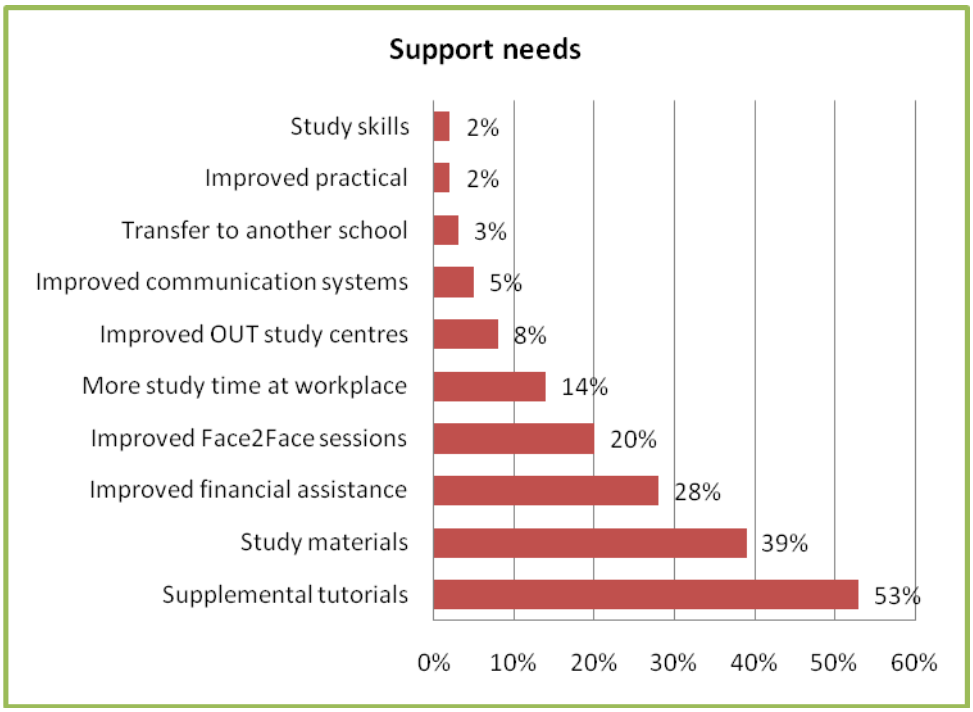


n=221

7.2.7 Support needed by the student teachers

Data were sought on student teachers' perceived support for them to be able to complete their courses of study in time. In the questionnaire, an open-end question was particularly designed to capture this information. Respondents were asked to write down what support areas, if any, they required to be able to complete the units they had registered for in 2007. Figure 7-14 shows ten groups of support expected by respondents and their percentage.

Figure 7—14 Student support needed by respondents



n=221 (for each support need)

Findings of the survey indicate that majority of the respondents (53%) perceived a need for *regular supplemental tutorials* to be able to graduate in time. Respondents indicated that they would prefer having regular tutorials rather than being left to study on their own. This could be due to lack of experience in a distance learning setting. Some of the responses were:

> *I wish I had someone around me to assist in making clarification on how I can tackle the questions from different courses I have chosen*

> *Some of maths units like Informatics programming or High level programming language are simply too difficult to study myself. I need someone to help in such units*

About 39% of the respondents indicated that their need was timely *availability of study materials*. Study materials are supposed to be the learning content that students spend time reading as conventional students would be listening to the lectures in lecture rooms. Study materials could be in any form – print or electronic – containing the subject matter. DL experts have devised ways of preparing study materials for self-study. Each course therefore has an 'official' series of lectures that have been written by a course expert, reviewed by other DL experts and printed. Well prepared study materials would give room for self-study in the way they are prepared. Print materials are a typical form of study materials at OUT. Ideally, students are provided with the study materials containing a series of lectures

and some activities for practice, at the beginning of the academic year. Every course registered for would have different material.

Study materials would include some compendia - carefully selected and compiled journal articles, book chapters, newspaper feature stories, etc.; that have relevance on the course. The compendia are used as additional readings to the existing study materials or as a temporary study material during preparation of some 'official' course material. Sometimes materials are borrowed from other universities after careful scrutiny by the recipient university. OUT started providing studies in 1994 using study materials from Nairobi University and Lagos University. Later on some materials were received from Indira Gandhi National Open University and Open University (UK). OUT have all types of materials. Getting the materials printed and reprinted and ready for issuing to students at the beginning of academic year is what is left with the OUT administrative staff. Study materials of whatever type – OUT, compendia, or borrowed –are supposed to be ready at the beginning of every academic year and at the regional office where the students would go and register for new courses and receive respective study materials.

This study reveals that in some regional offices some study materials were not readily available at the beginning of the year such that students were concerned about the impact this would make in their study progress. Some of the respondents' comments were:

> *Our course is lacking materials, so I wish OUT could print a lot of maths study materials; otherwise we can't do assignments in time nor can we have good preparation for the exams*
>
> *(Study) materials are not brought at the right time and this makes studying more difficult*.
>
> *Some assignments are not distributed in time. You just wonder how one is ever going to complete the course under this arrangement. Let OUT be a bit more serious on this*.

Students' responses from about 28% of them revealed that they would like to have some *improvement in financing* of their studies. According to the Memorandum of Understanding between the Ministry of Education and Vocational Training and OUT, the Ministry would pay for 1500 student fees, finance for accommodation and meals during face to face meetings and provide venues for the sessions. The improvement that is being proposed by students is that involved in travelling to and from face to face meetings. In 2007 students also found themselves attending the normal test and examinations conducted at the regional office for which they had to incur travel, meal and accommodation costs. Asked why they had to attend two different test venues, the response was '*lack of clear communication'*. The costs for the latter are those mainly being cited. But the student teachers would

want to see their sponsor taking a more responsibility to include costs of stationery, practical training as well as teaching practice.

> *We need full financial support to cover the cost like stationery, teaching practice and transport allowance for attending tests, face to face meetings and other OUT arranged meetings.*

About 20% of respondents regarded *improvement of face-to-face sessions* as being key to their study progress. OUT organized face to face sessions for the LTP are a unique feature of the programme. The LTP face-to-face is longer than the normal OUT face-to-face sessions. During these sessions, students were supposed to be given tutorials to each of courses and some general information on self-study. At the end of the sessions students would be given tests and examinations. Duration of the sessions was usually four weeks on campus. The timing was of crucial importance. According to the programme plan there were to be at least three sessions in 2007 whereby the first session was to be conducted at the beginning of the academic year. During this session, students were supposed to be introduced to the courses they are to register for in the year and given some guidelines on studying the first half of their study materials. They were then to be provided with assignments for the first half year, namely Assignment One. The second face-to-face session was scheduled at the end of the first half of the year, i.e. June in the LTP calendar. During this session students were to revise the first half lecture series and do the first test for each course. Thereafter they were to be introduced to the second half of the lecture series. The third session was scheduled at the end of the year when students would revise the second part of the lecture series and do test II and examinations.

This plan did not work during the year 2007 and students were concerned about its impact on their progress. The first face to face was in April, three months after the start of the programme. First phase data collection for this study was conducted during this first face to face and responses reveal that students viewed the face to face sessions as having a lot to be redesigned. Some courses did not have tutors and for those that had tutors, some of the tutors seemed to be hurriedly prepared for the sessions.

> *.....I could see that our maths course lacked tutors at the face to face; I think it could be helpful if OUT had brought in some part-time maths tutors.*

> *Let the first face to face session be conducted at the beginning of the academic year so as to enable students get the necessary introductory information right at the beginning of their programmes.*

Included in the list of support needs was a need for a more *enabling workplace* and it attracted about 14% (n=30). From the respondents' views, there were schools that could be seen as DL learner-

friendly; but also there were those which were not. Student responded that they would like to see improvement at the workplace so that the schools become more enabling for the DL participants. Some quotes from the questionnaires reveal that some school heads were a barrier to DL. They would reject permission for a student teacher to attend a face to face session for reasons best known to the heads themselves. They would be the first to discourage the untrained teachers and actually discriminating them as belonging to a different category. They would be the first to call the new teachers some disapproving names.

The main feature of the schools however is not hostile school management. In fact, a majority of the respondents reported having supportive school management. Respondents seem to understand the fact that the problem in schools is not the school management, but the school itself. It is the infrastructure present in the school that is responsible for the poor student support at school level. Unfortunately, even the school management could do little about it. Most respondents cited scarcity of teachers in secondary schools. This is the whole point for having the untrained teachers in the first place. If schools had enough teachers most probably there would be no need for having the untrained teachers, and LTP for that matter. Schools lack teachers. Under such reality the student teachers find themselves having heavy teaching loads; leaving them with little time to concentrate on their OUT studies.

Respondents indicated that choice of school for teachers was primarily a matter of posting teachers where they were mostly needed. Students had the opinion that there was no consideration of the repercussion this would have on their training particularly through DL. Here are some of the respondents' views on this:

> *Heads of school should be informed that we are studying.*
>
> *If my school had a computer lab and the internet it would be very helpful to my studies.*
>
> *I need more private time for studying because in my school there is no other English teacher, hence I don't have enough time for studying. If more English teachers are added to my school it will be a great support to me.*
>
> *The Open University should advise the Ministry to give order to the headmasters to reduce number of periods not only for me but to all other students of the OUT. They should also give us at least three days off per week so that we can go to the centre for reading.*

Improved study centres were another area of support which attracted some 8% (n=17) of respondents. Two main concerns by respondents were to improve the existing study centres and to establish some

new study centres particularly in rural areas. The second proposition requires a well considered approach. Establishing OUT rural libraries may become a costly and most likely an unaffordable option. Collaboration with local authorities as a strategy to support students could instead work with regard to study centres, within districts. Partnership with regional libraries was reported by respondents to be ineffective because the regional libraries, just like the OUT regional study centres, are usually too far from the student.

Perhaps OUT could open different centres even in remote areas.

Learning materials in the regional centres are not enough.

Improved communication as a category of comments received about 5% of respondents (n=12). Communication is quite important particularly in a DL setting. Communication is what keeps the otherwise distant participants together as an organisation. In absence of effective communication systems, DL systems are usually reduced into ineffectiveness. With the availability of Information and Communication Technology, communication has been more effective in most DL systems. The use of electronic mail through computer and mobile phones are particularly important. The study shows that to some extent communication will have to be improved if the students are to progress smoothly with their studies. Areas of improvement include preparation and distribution of the prospectus and the university calendar. Some students in LTP lacked clear information on how to choose courses for registration, information that they could easily access from the prospectus if the prospectus were timely distributed to all regional centres.

Some student teachers had personal queries that required immediate responses from the OUT headquarters; some as urgent as change of programme of study, with no response after three months. The regional officers are also portrayed as people who lack information, usually indicating that they need to get in touch with headquarters before they could respond to a query raised by a student.

Official information is required rather than hearsays. For example information on how many units to take in a year was never officially communicated.

There is no enough assistance in programme and unit selection in my regional centre. To solve this Prospectus should be distributed before the academic year begins.

I did not apply for the B.Ed programme I'm taking. I'm not comfortable with it. I had applied for a B.A History and Geography; and I have got all the three principal passes. I wrote a letter to OUT asking to change the programme. I haven't received any response.

Probably a very extreme reaction by the student teachers is a demand *to be transferred from schools* that they saw as detrimental to their OUT studies. A need for transfer to another school had however a

small percentage of respondents, about 3% (n=7). The majority of respondents who indicated a need for transfer cited "lack of group for discussion" as the reason. In the schools where they found themselves posted, there were no other students with whom to form a study group. This is quite interesting as student teachers viewed peers as a main feature of the LTP.

> *My school is located too far from other schools where my fellow students are. The Ministry could make some transfers for teachers like me.*

> *You could help me complete the units I have registered for in 2007 by getting me a transfer to a place where I can travel more easily in search for internet services, also to be able to discuss with my fellow students. In my current place there is no good transport, I'm alone – nobody to discuss with.*

Improved practical training was raised as an area of interest by about 2% (n=4) of the respondents. Particularly science student teachers were worried that they would not be able to complete the requirement of 20 practical projects, in three years, unless practical sessions were increased.

> *For my science subjects I have to get more practical sessions.*

Need for provision of *study skills in DL* was another area of support that had a small percentage of 2% (n=5) of respondents. Induction is so crucial in any DL programme in that issues related to study skills are usually discussed during induction. LTP induction was conducted after students had already registered and begun their courses. They did not have an opportunity to get assistance in study skills such as accessing reference materials from the library and the internet, forming and participating in study groups, using computer and academic writing.

> *There is disunity among the OUT students. I wish we had enough moments when we are together discussing*

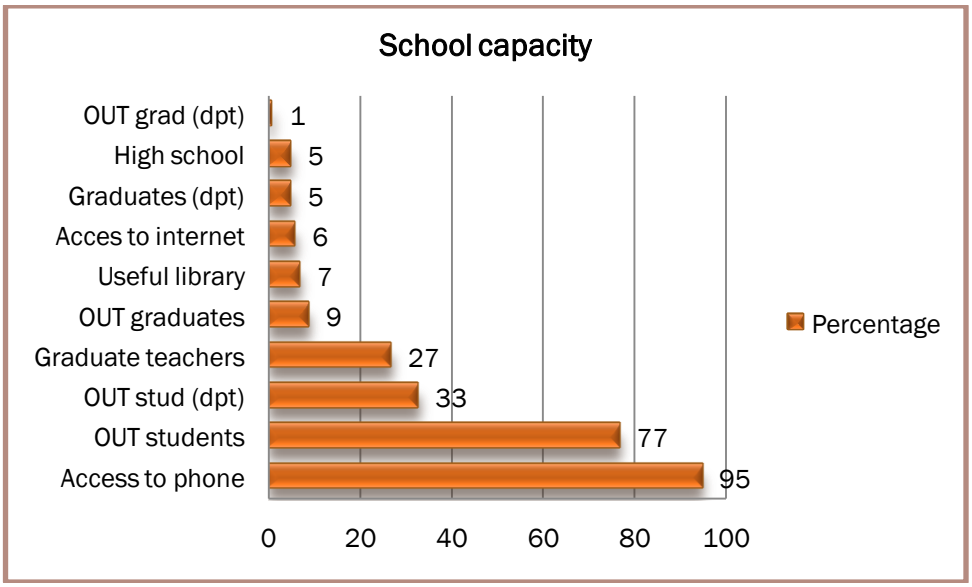
> *I need to get trained on the use of computer and the use of the internet when looking for relevant reading materials.*

7.3 *School factors*

7.3.1 School potentialities

Data were sought on the potentialities that schools already have, which could support DL student teachers in their studies. Respondents were asked to describe their schools, particularly whether: *a high school, a school with teachers with degree in education, a school with teachers with OUT degree, department with teachers with degree, department with teachers with OUT degree, school with other OUT students, department with other OUT students, a school with useful library, a school with a reliable telephone network,* and having *access to internet services within the school area*. Table 7-15 shows percentages of school elements that were reported as school attributes.

Figure 7—15 School attributes



n=221

Results from this study reveal the typical nature of schools of the respondents. A typical school is not a high school because only about 5% of the respondents are posted to high schools. It will scarcely have graduate teachers because only 27% of student teachers found at least one teacher with a degree in their schools. The school will have no graduates from the OUT for only 9% of sample has met such teachers in their schools. Subject departments will have no graduate teachers since only 5% have actually met such teachers in their departments. OUT graduates are almost non-existent in departments as less than 1% of LTP student teachers have such teachers in their departments. The school will be lacking a useful library for only 7% have witnessed such a library in their schools. Internet services may not exist within the school area since only 6% of the respondents have such services in their school areas.

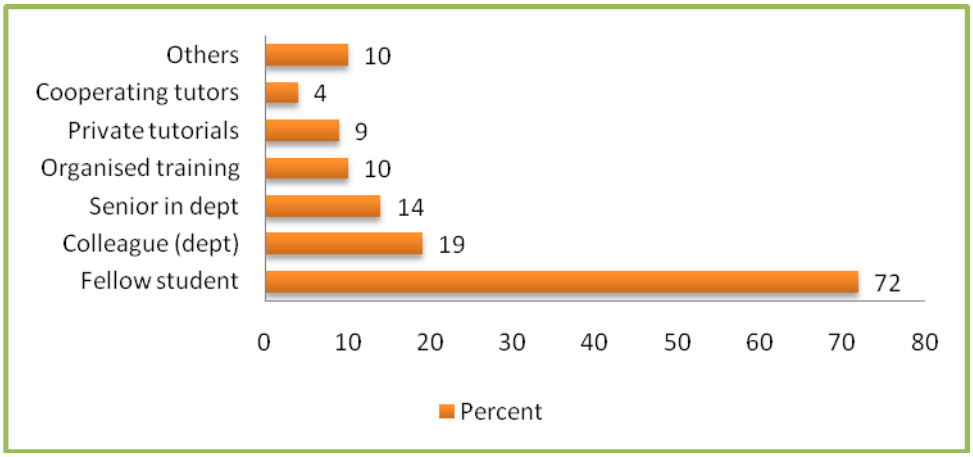
The 'partner' schools however will most probably have two or more OUT students as more that 75% of the respondents reported of having other OUT students in their schools. The school is most likely to have a reliable mobile telephone network as 95% of respondents presented their personal mobile telephone contacts.

7.3.2 Student support providers in schools

Respondents were asked to tick accordingly whether they usually received support for their OUT studies from listed variables. The variables included: *a fellow OUT student, a colleague in department,*

a senior teacher in department, a cooperating tutor, organized school training sessions, private tutorials, OUT tutor, and *others.*

Figure 7—16 Supporters at school



n=221

Results of the study show that student teachers who reported having support from a senior teacher in a department made 14% of the sample. Those who have had school organised training sessions made only 10%. Those who had access to support by cooperating tutors were only 4%. Yet, student teachers who had supportive colleagues in departments made 19% of the sample. About 9% of respondents indicated that they had support from private tutorial sessions. Some 10% of the respondents also indicated having academic and professional support from *others*. The *others* category included family members and university graduates outside the school. Interestingly, the result of the analysis reveals that student teachers in the LTP rely on their fellow OUT student teachers available in school as their tutors and mentors.

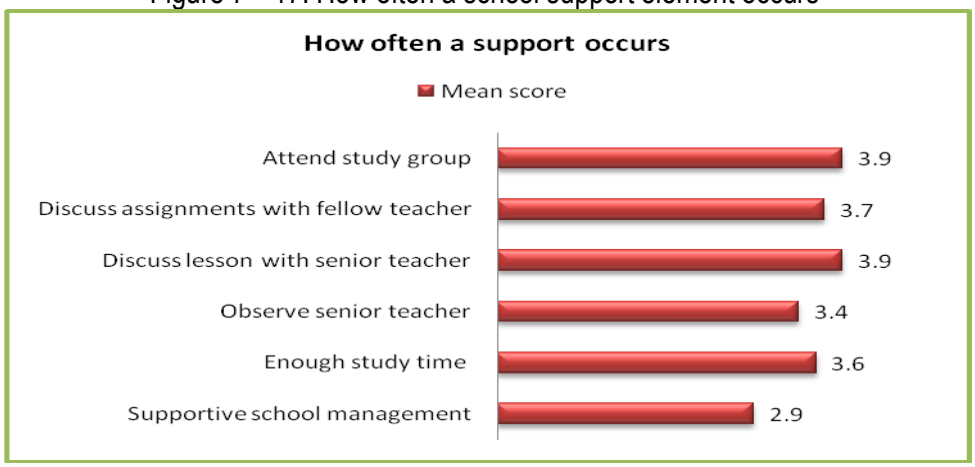
7.3.3 Frequency of the support provided

The study further sought to establish frequency of school support elements such as *supportive school management, enough study time, observing senior teachers in classrooms, lesson discussions within departments, discussions on OUT assignments within department,* and *OUT study group discussions within the school.* Figure 7-17 shows analysis of ratings on the school elements.

Results show that school management is likely to be supportive, with a mean score of 2.9 in a score range of 1 – 5. This implies that student teachers appreciate efforts made by their school heads in supporting their study programmes. However, the school realities make it difficult for most basic school support elements to take place on regular basis. For example, enough study time with a mean score of

3.6 affirms scarcity of teachers in departments and heavy teaching loads. A similar trend is portrayed within other elements such as observing senior teachers in classroom (3.4 mean score), discussing lesson with senior teachers (with a mean score of 3.9), discussing assignments with fellow teachers (mean score of 3.7), and attending study groups (mean score of 3.9).

Figure 7—17: How often a school support element occurs

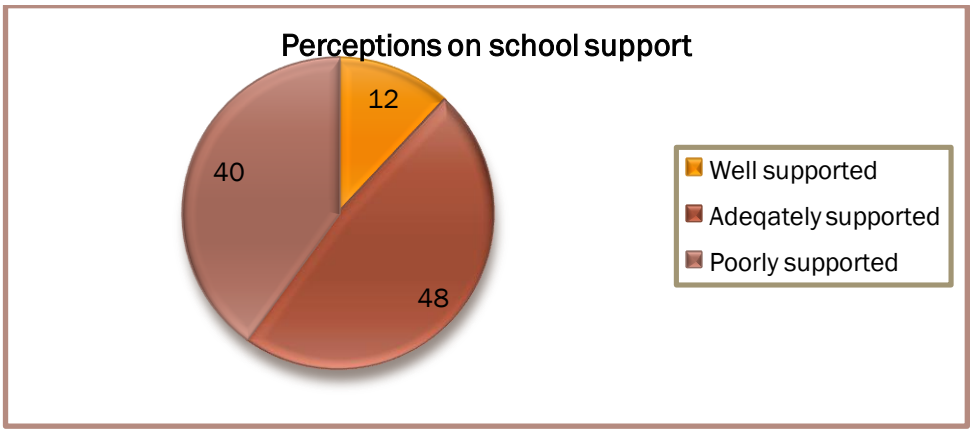


Range: 1 (*Very often*) – 5 (*Never*)

7.3.4 Perceptions on school support

Figure 7-18 presents a pie chart on how well respondents felt they were being supported by schools. About 12% of the respondents reported being supported well at school level. About 48% indicated that they were being adequately supported. However, 40% of respondents reported being poorly supported.

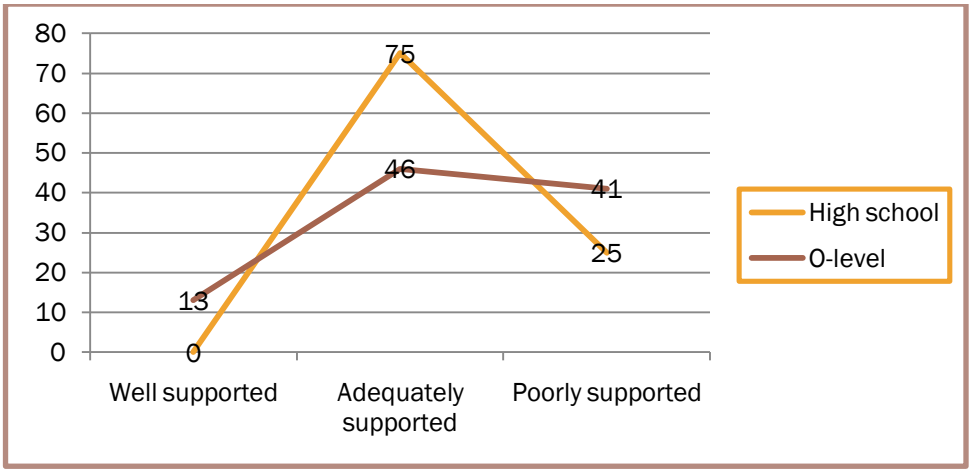
Figure 7—18: Perceived school support



A high school - school support cross tabulation reveals that respondents from high schools were mainly adequately supported (75%, n=9) while 25% (n=3) poorly supported, and none well supported.

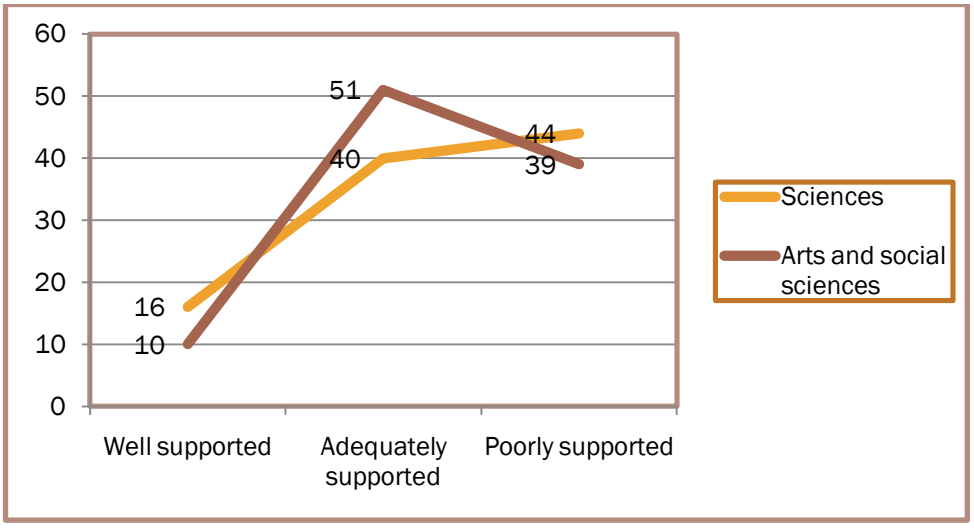
Respondents from ordinary secondary schools were well supported (13%), adequately supported (46%) and poorly supported (41%) (Figure 7-19).

Figure 7—19: School support by type of school



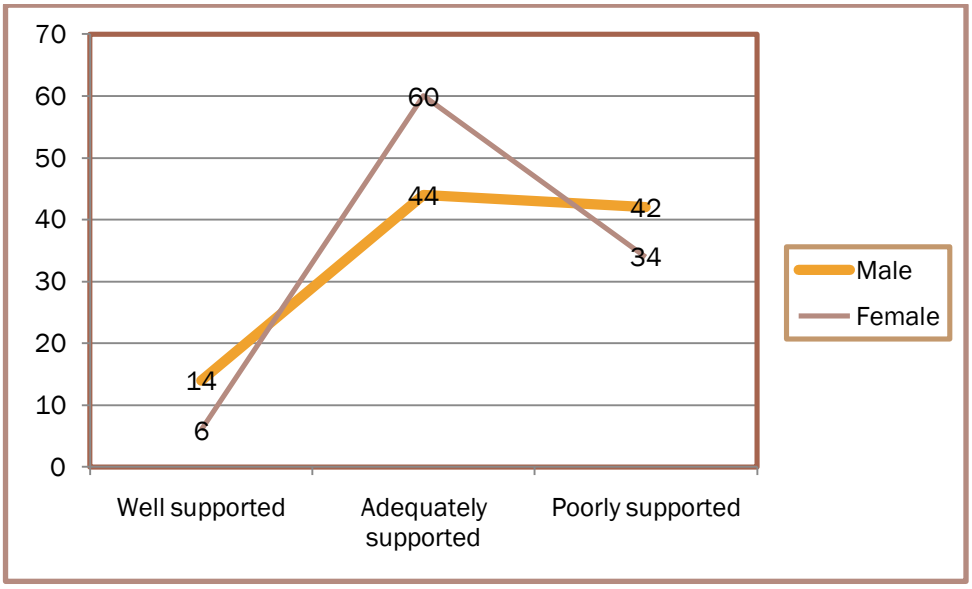
School support by area of study generated a similar trend between respondents from science and those from arts and social sciences. Majority of the respondents from both areas of study indicated that they were adequately supported by schools (Figure 7-20).

Figure 7—20: School support by area of study



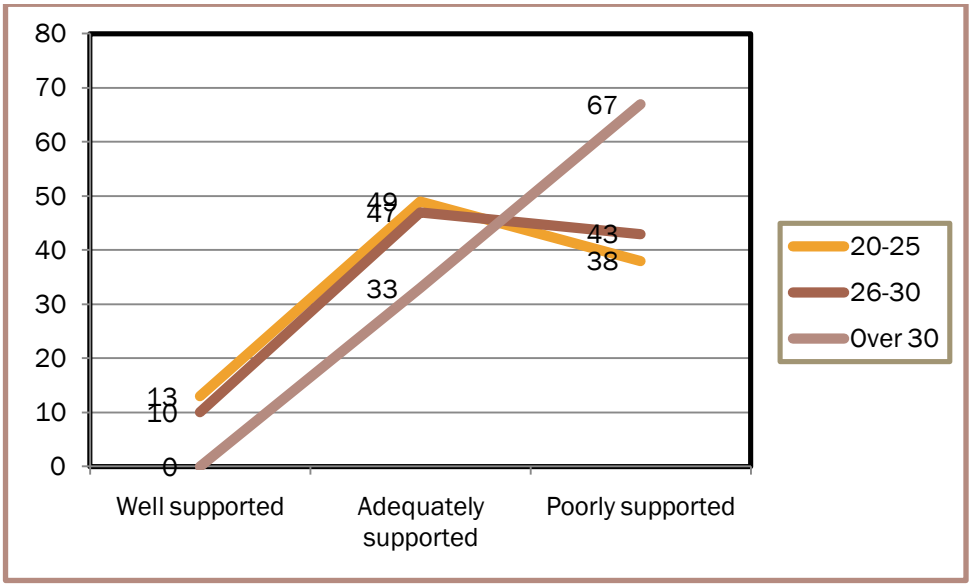
Slightly, more male feel comfortable with school support as compared to female (Figure 7-21). While 14% male feel well supported, 6% female feel the same. Yet 34% male respondents feel poorly supported as compared to 42% females.

Figure 7—21 School support by gender



Respondents across age groups had similar perceptions on school support if the over 30 group (n=9) is excluded. The difference in responses between perceptions by the 20-25 group and the 26-30 group is less than 3%.

Figure 7—22 School support by age

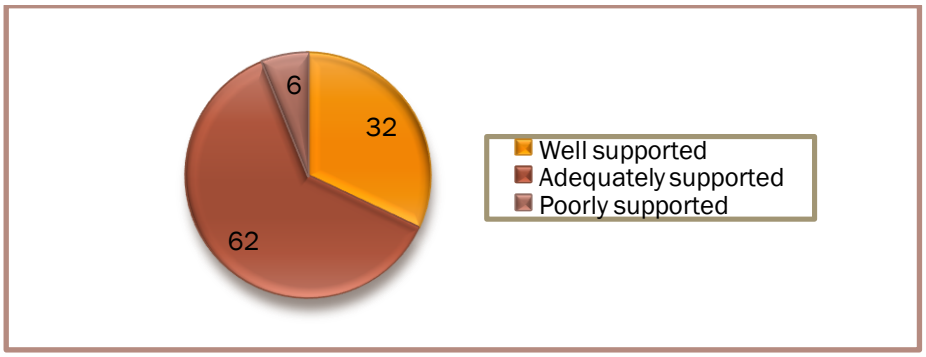


7.4 *Perceptions on OUT support*

Relatively, OUT support was more appreciated by the respondents. Respondents who felt they were being well supported by OUT increased to 32% from 12% who reported being well supported by school.

While almost 40% had reported being poorly supported by school, only 6% of the respondents felt poorly supported by OUT (Figure 7:23).

Figure 7—23 Perceptions on OUT support

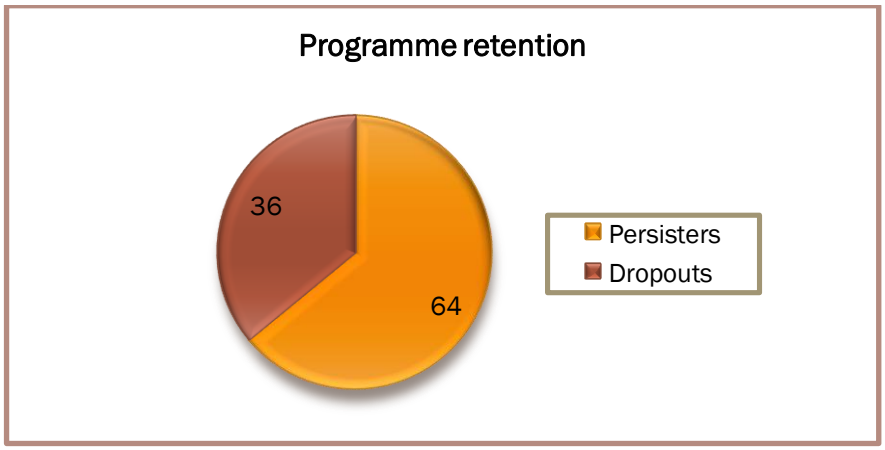


Student appreciation of the OUT student support seems to increase with age. Percentage of those who reported being '*poorly supported'* by OUT in the three age groups decreased from 7% (20-25), to 4% (26-30) and then 0% (over 30). The rest of the respondents indicated that they were '*well supported*' or '*adequately supported*'.

7.5 *Retention*

Analysis of programme retention (Figure 7-24) revealed that 64% of the respondents had reregistered for the second year of the study, while 36% did not reregister due to various reasons. Retention data were obtained from the 2008 LTP registration list released by OUT.

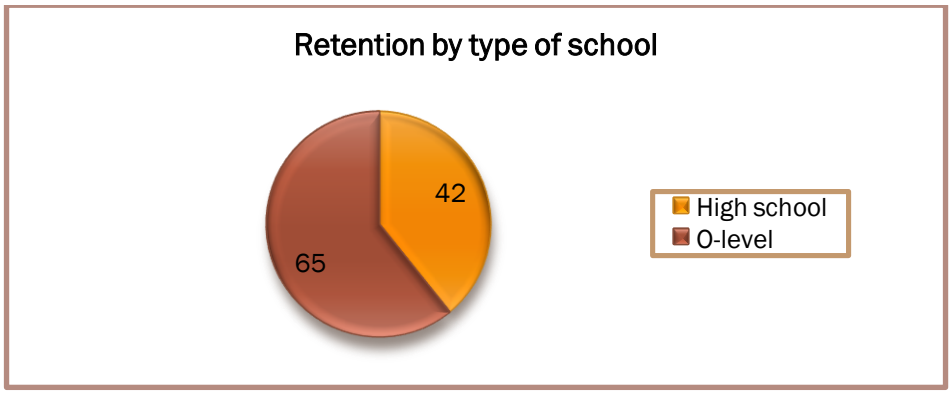
Figure 7—24 Programme retention by type of school



n=221

It was reported in Chapter Six that registration at year two depended on respondent's presence at workplace, suggesting that *LTP retention = teacher retention at school*. Realities at the respondents' workplace could be analysed to understand the interconnectedness of the school, OUT and other factors that led the 34% of respondents not to persist in the programme. This study reveals that well established schools like high schools did not necessarily improve respondents' retention and teacher retention for that matter. High schools had only 42% (n=5) respondents retained compared to 65% retained by ordinary secondary schools (Figure 7-25).

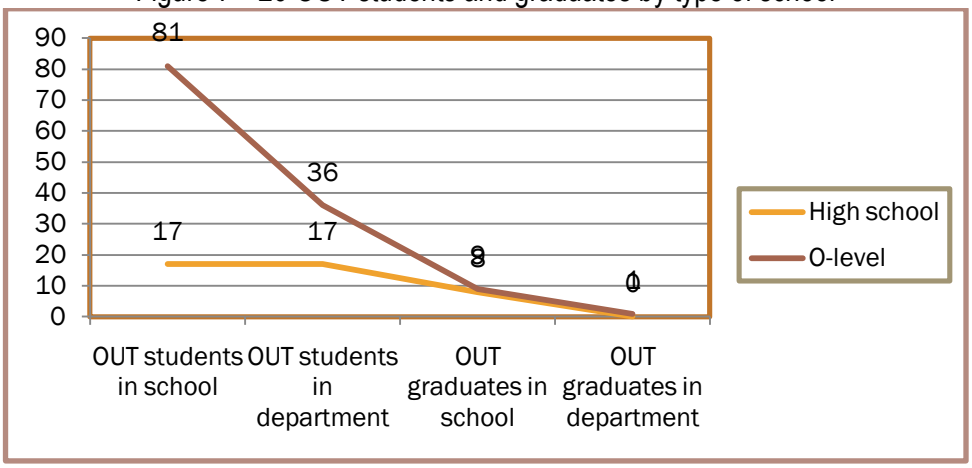
Figure 7—25 Retention by type of school



n=221

The study reveals that respondents who worked in high school lacked presence of OUT at the workplace. While there were 81% of respondents from ordinary schools who had one or more other OUT students in their schools, only 17% of respondents from high schools did have other OUT students in their schools. While 36% of respondents from ordinary schools had one or more OUT students in their departments, only 17% of respondents from high schools did have another OUT student in their departments. Furthermore, it was revealed that the presence of OUT graduates in schools and in departments was more frequent in ordinary schools than in high schools (Figure 7-25).

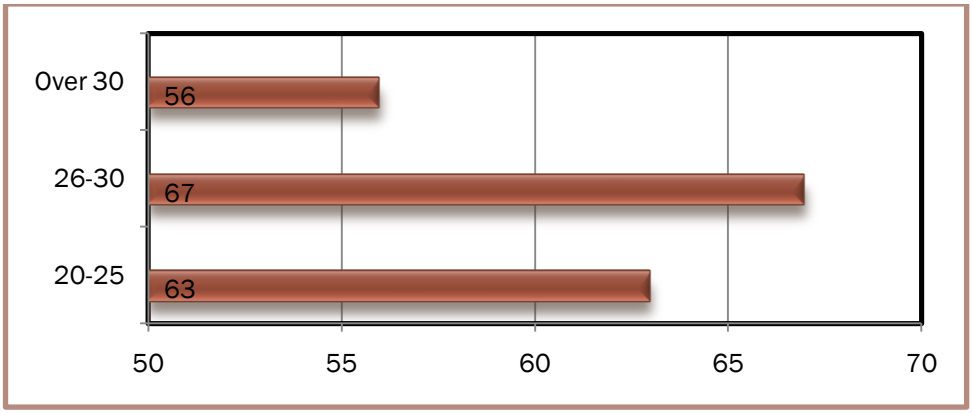
Figure 7—26 OUT students and graduates by type of school



n=221

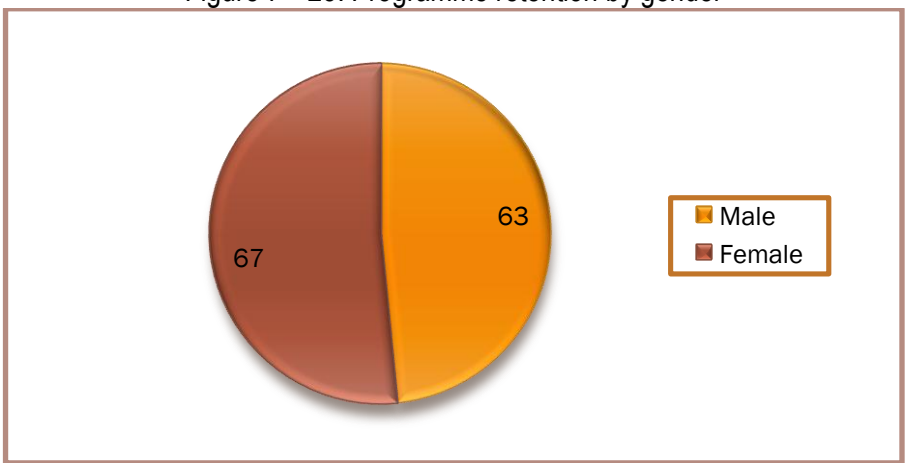
Age as a determinant of programme retention suggests that retention improves from 63% for the 20-25 age group, to 67% for the 26-30 group, but then retention is reduced to 56% (n=5) for the over 30 group (Figure 7-27). Findings show that it is the previously self-employed respondents who have the lowest rate of retention (52%). On the other hand, respondents direct from college and the unemployed had the highest retention at 70% and 69% respectively. Slightly, female respondents have a higher retention (67%) than male respondents (63%) (Figure 7-28).

Figure 7—27 Retention by age group



n=221

Figure 7—28: Programme retention by gender



n=221

7.6 *Conclusion*

In Chapter Seven it has been shown that most respondents in this study were students in their early 20s. Most of them were working in rural ordinary secondary schools; they have been presented as having positive attitudes on teaching. They have some support needs some of which OUT and schools are not fulfilling. Respondents needed support on a range of areas: improvement in information and communication system; timely distribution of study materials; improvement in the way face to face meetings were conducted; improvement of study centres at regional offices as well as establishment of some more near students; improvement on conducting practical training sessions; and provision of study skills.

At school level respondents needed regular supplemental tutorials and guidance. They required heads of school to recognize their state as DL students as well as teachers and provide them with enough study time. The Government could support respondents' needs on financial assistance. They needed more finances to cover frequent travels for face to face meetings, practical training; and food and accommodation associated with those travel. They also needed assistance with book and stationeries as well. The Government could assist in making some necessary transfers from rural schools unsuitable for DL students.

Programme retention rests on at least three sets of determinants – the student teacher, the realities in the schools (respondents' workplaces), and support services provided by OUT. In most cases it could a combination of these. Student teachers' age, does not appear to have impact on retention, particularly if the over 30 group (which had very few respondents) is excluded from analysis. There was a 4% difference in retention between the 20-25 age group and the 26—30 age group. Generally, the over 30

group had the lowest rate of retention. There was another negligible 4% difference between male and female respondents with more females being retained.

Retention is however highly affected by school-related factors such as type of school. There was an 18% difference in retention between high school and O-level schools with O-level schools retaining more respondents. The observed difference could be due to differences in the two settings. It has been reported that O-level schools had more OUT-related factors such as other OUT students and OUT graduates working within departments and schools. At one point respondents seem to have a pushing factor to get out of workplaces which were mainly presented as unsupportive to their studies. However that does not explain fully why most students in well resourced schools, like in the high schools, did not persist. Case studies presented in the next chapter could provide more understanding on this phenomenon.

Chapter Eight: Case Studies

The difference between school and life? In school, you're taught a lesson and then given a test. In life, you're given a test that teaches you a lesson (Tom Bodett, American author).

8.1 *Overview of the chapter*

The reality in schools where the respondents of this study were working was a key aspect in the study. The assumption that featured the whole study was that a supportive school would have a positive effect on student retention of the licensed teachers' programme of the Open University of Tanzania. This chapter presents accounts on specific schools sampled as case studies. The schools whose information is presented in this chapter were purposively sampled for their likelihood of having student support structures and practices, as reported in the student questionnaires. The aim was to explore and capture good practices in supporting distance learners based in school with view to making recommendations for other schools to emulate. A general school community and environment is presented for each case, followed by realities within the school structures and practices. Lastly the student data is presented as per various sources including questionnaire, personal interview, interviews with heads of school and OUT records.

8.2 *Maendeleo Secondary School*

8.2.1 General background information

Following the late 1970s UPE initiative which led to increased primary school enrolment and graduation by early 1980s, it was inevitably important to increase the number of secondary schools. The central government had not done much to match the UPE initiative with the need for expansion in secondary education, mainly because of the emphasis on primary education orchestrated by the economic crisis of early 1980s. It was left for the local communities and private institutions to fill the gap for more secondary schools. The school community under a district-led initiative, decided to build a school and it was already admitting the first UPE products, by 1984.

It was so challenging recruiting and retaining teachers. Teaching, unlike many other jobs then, had an open door recruitment policy, such that all teacher graduates were assured of a job in public schools. Teaching in public schools was regarded as more secure than in the private sector, including community schools. Maendeleo School, which was managed together with seven other similar community schools in the district, had to learn to meet the challenge usually through the use of

alternative teaching personnel. There were very few trained teachers in the labour market who were willing to leave the teaching jobs in the public secondary schools.

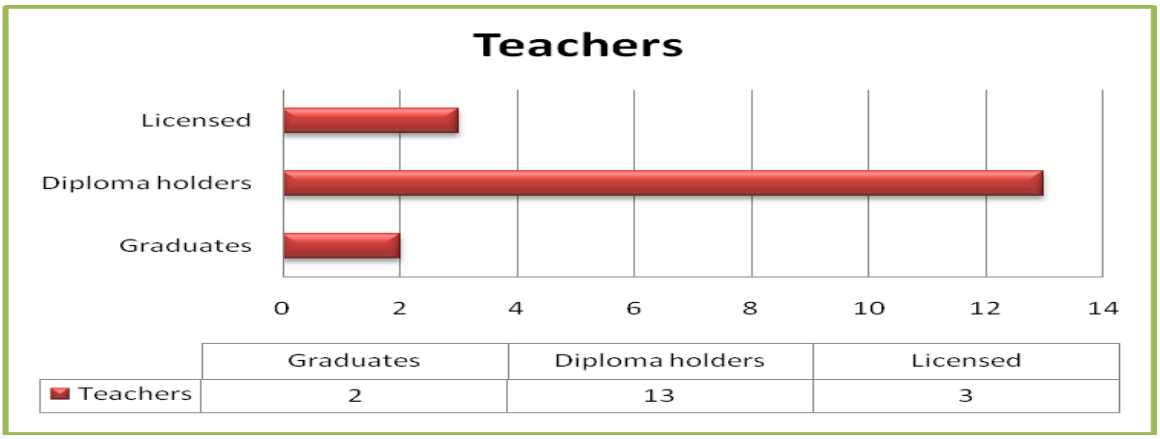
At certain moments the school, and the other seven, would rely entirely on untrained, undertrained and volunteers as teachers, most of whom were likely to leave sooner or later. The untrained were usually high school leavers who would normally work for a year or less during their gap year before they could go for further studies; and some redundant workers from the public sector during when the Government was undergoing some structural adjustments. The undertrained were some 'good' primary school teachers who were, mostly for prestige, willing to leave from the Government owned primary schools. Volunteer teachers included a great number of national servicemen and women from a nearby National Service Camp, at least up to the early 1990s when the compulsory National Service programme was abolished as part of the economic structural adjustment. A few other volunteers were those from abroad obtained through some local and international links with such organisations as Volunteer Services Overseas (VSO), The Peace Corps, and the Students Partnership Worldwide (SPW).

The untrained teachers then were in a state whereby they were forced to remain in private schools where they were underpaid, unsure of the next pay and with insecure job prospects, unless they made effort to develop themselves to a required professional level upon which they could either qualify for better pay or move to public schools. Teacher trade unions would not register untrained teachers as member teachers. But for this particular school, the drive for teacher training and development was triggered further by transitions which were to be seen as from 2005. The school was to be adopted by the Government under the SEDP programme. As such untrained teachers were alerted that they might lose their jobs unless they showed that they were learning towards the required qualifications. Complicating the situation further, was a plan to turn the school into a high school, following the Government directive that each district would need to earmark two schools to be for advanced secondary education. A high school therefore would require all teachers teaching the A levels to be university graduates. It was reported that teachers in this school began enrolling for courses in education through distance learning as early as 1996. By 2007, two had already graduated from OUT, and eight others were still OUT students, three of whom were in the final year.

8.2.2 The school

The school was established in 1984 as a non-government school owned by a local community organisation. In 2005, the school was re-registered as a government school. It has around 600 students and 18 teachers, as presented in Figure 8.1.

Figure 8—1 Teachers and their qualifications at Maendeleo Secondary Schools, 2007



The school is situated in a rural small town about 50 km away from the district major town and about 100km away from the regional headquarters, where the OUT regional centre is based. The school has a reasonably good library. Apart from some text books for pupils, the library harbours some useful education books on psychology, curriculum, and encyclopaedia for general references. Interestingly there were some OUT related study materials kept in the library as a personal initiative by the school head who happened to be a graduate of the OUT, trying to encourage all teachers to enrol for a degree programme with the Open University.

At Maendeleo, there were many ways in which LTP students were supported to integrate into the school system, learn to teach and excel in their DL. Teacher development meetings (TDMs) as a concept features the core practices of teacher professional development in the country. The concept is to have some regular teacher meetings to discuss topics in the curriculum and get to internalise their essence and how to teach them. An interview with the school head drew a historical background to TDMs as mainly being triggered by teacher development projects such as the English Language Teaching Project which was introduced in early 1990s which was funded by the British Council. The project was meant to be sustainable in that schools in clusters would continue running seminars on a regular basis for teachers on how to teach various areas of the curriculum. The head of school, then an English teacher in another school was fully involved in the project as a school-based trainer.

TDMs across subjects were increasingly being organised on a cluster basis. This school was usually the centre for most of the TDMs and most teachers had been participating in the meetings. There was at least one TDM for each subject taking at least two days, in every term. In the same spirit, a parallel

project for science teachers was going on that was normally organised in seminars of five days, ideally for every science and mathematics teacher.

Staff meetings were another opportunity for new teachers to be integrated into the school system. Although staff meetings were organised for general administrative purposes, the head of school was of the opinion that providing opportunity for teachers to have regular interactions would make them more integrated into school mission and values. It was observed that the school had staff meetings three times per week.

As pointed out in the background, teacher upgrading had been one of the major issues on teacher professional development. The main strategy was to encourage enrolment with the Open University of Tanzania. The whole idea was as a result of the fact that when the school was under private management, teachers were being discouraged from joining conventional universities because it meant losing their job. By his experience the head of school confirmed that teachers who joined conventional universities did not return to the school upon graduation. The DL option was the most recommended so it retained the teachers throughout their studies as well as after graduation.

The school head observed that the concept of mentorship was a new one. He pointed to two programmes that dictated school mentoring: the licensed teachers recruited and deployed in school in 2004 and 2005 for which the Ministry had issued a directive for all schools to have a mentoring programme to support smooth integration of the untrained teachers. Asked how the directive was implemented, it was apparent however that the programme relied on initiatives and resources of individual schools. This school had a long history of handling untrained teachers, as pointed out earlier; therefore mentoring of the new untrained teachers was just a matter of formalising a long informal practice. In 2007 the school had three licensed teachers working under mentorship of heads of departments.

The organisation of the mentoring programme was unsystematic though. There was evidence that the new teachers had been submitting their schemes of work and lesson plans, and that the heads of departments had been involved in assisting them prepare the schemes and plans. The new teachers had been provided with a reduced workload as part of gradual integration to the teaching job. It was not clear however that minimum teaching load was a result of mentoring or simply a result of availability of other teachers in the departments who could teach the lessons. It was not clear also whether mentoring was meant to continue throughout a period before the untrained teachers could join a teacher

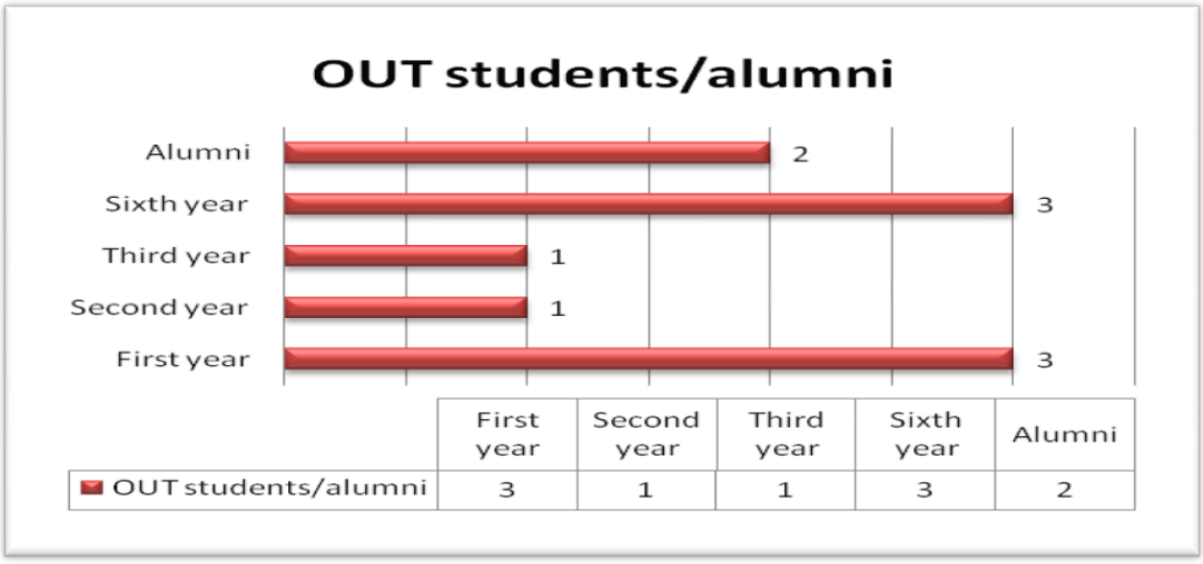
education programme. The head of school could not explain the duration of mentoring as he said he needed clarification from the Ministry.

A parallel mentoring programme was also going on for the school-based diploma teacher trainees. When I visited the school in 2008, there were six new school-based teacher trainees from two different teacher colleges. They were going to practice teaching for a year before doing their final examinations. The school-based diploma teacher trainees required mentoring at school. The approach was the same as for the licensed teachers, that is, the use of heads of departments to support and monitor their teaching process. A different feature with the diploma programme was that the college tutors made school visits to assist and assess the teaching progress.

It was observed that it was a school culture to assist those studying for a degree. Because the eight OUT student teachers in this school were in different stages of their studies, it was easy for those in higher stages to assist those in the lower ones, both as cross-level mentors and tutors. In the final (sixth) year there were three student teachers, in the third year there was one, in second year one, and in the first year three. Support was usually arranged subject-wise. The student teachers at a higher level would volunteer to teach some topics as asked by those in the lower level, provide guidance on accessing study materials and other reference books, assisting with assignments, providing moral support and generally posing as models.

> *The troubles we have had in the past in recruiting, retaining and training teachers have made us more aware of the issues to focus on when supporting new teachers. Most of us had to undergo such difficult days* (Head of school interview).

Figure 8—2 OUT students and graduates at Maendeleo Secondary School, 2007



OUT book collections is a simple idea yet a very useful initiative. When I first interviewed the school head about school-based support to LTP students he immediately pointed to the need for books and other study materials. He was of the opinion that support to DL students should mainly be about access to reading materials. There were OUT-related book shelves in the school. The idea of OUT book shelves is a form of book donation project initiated by the head of school. The head of school himself had initially been a student of OUT. He had accumulated various study materials directly or indirectly related to OUT study. The head of school had used his influence to have the school library stocked with reference books that could be useful to degree students. Most importantly is the open access to the materials which were displayed in the school library. In this school OUT book donation became successful because the number of OUT student teachers kept on increasing.

OUT students receive study material for each of the courses for which they registered. The materials are only used for that academic year, meaning that by completion of the course the study materials are put aside somewhere in the home library. They are not returned to OUT because they are a property of the student, as part of the tuition fee paid for the programme. In the concept of OUT book shelves, instead of putting away the already used materials, the OUT student donates the materials to OUT shelves. As such new teachers and those teachers who are not graduates could read and get inspiration for upgrading through OUT.

It has been observed earlier that the 2007 LTP academic year lacked clear sharing of information between the programme coordinators and the Ministry on one hand and the LTP students on the other hand. Students saw themselves having frequent travel to face to face meetings, to examination centres, to regional libraries and regional centres, and similar travels, only to learn later that they actually needed not to attend the examination centres. Unfortunately they did attend the examination centres for about a month costing them more than what they could earn from their salary. The immediate support was from an advance payment from the employer or any financial assistance from the school. The LTP student based in this school was lucky to be supported financially. In this school, it was further learnt that the LTP student had been frequently assisted to travel to the OUT regional centre. In the student diary he had kept for a week, he had indicated that he had travelled twice, both trips paid by the school because while in town he was going to perform some official duties as well.

8.2.3 The student teacher and progress in distance learning

Frank, the student teacher, was 22 years old when he joined LTP, and he was a B.A (Ed.) student doing history and Kiswahili. I kept track of his development since April 2007. At the April face-to-face meeting, he responded to the student questionnaire on school-based support. He reported that he had a supportive school management and that he had opportunity to learn from fellow students and members of staff. The school had teachers with education degrees, and of particular interest, from OUT; and that the school had more OUT students. Although he had found studying at a distance harder than he had expected, he had otherwise, found teaching more enjoyable than expected. He had expressed concerns about the programme: that for OUT there was a delay in getting some study materials in some mentioned courses; and that at school level, many tasks could lead to reduced study time and might affect completion of some course units.

In November 2007 he was interviewed. He had completed all assignments and tests for the 16 units he had registered for, in the first year. Results for the assignments and tests were very impressive. The final grades were to be calculated later on after doing the annual examinations. While during the April survey he had reported that he had no access to the internet, this time he reported that he had internet services within the locality, and that he at least weekly visited the web. In addition, he always had access to internet when visiting the regional centre, the only nearby OUT facility made available for students.

Although the school timetable was usually a busy one, he had a self study timetable to which he had to learn to adhere. In a diary kept by the student teacher, he had indicated that he had set two hours of discussion on classroom teaching, and two other hours for OUT studies, per every week day. The discussion time would be spent towards the end of the day revisiting some of the teaching activities of the day. He said he felt at ease asking fellow teachers why certain teaching issues happened the way they did, and how a better practice could have been reached; and thus thinking ahead of the next teaching scenarios.

He had people, particularly the former OUT students and ones at the higher OUT level, to emulate. "*I know it is possible because there are teachers here who have made it*". He could approach the other OUT student teachers for advice and for arranging collective strategies, where possible. He was however realistic about some of the challenges when studying through DL, particularly with the OUT. Of great emphasis was late availability or unavailability of study materials at the regional study centre. He observed that if all study materials were to be available it would be far easier for OUT students to

complete studies in time. He pointed to the possibility that schools could play a greater role by simply sending books and students manuals to the school libraries. He said:

> *OUT could work better by entrusting some schools with the necessary study materials, at least a copy for each course. My school has over a period of time, kept a stock of study materials from previous OUT students who were willing to contribute to the school library. These materials have been assisting new teachers, including those teachers in the nearby new schools, on teaching, school management, and more importantly, on OUT studies (Student teacher interview).*

Although he usually had some other non-classroom teaching duties to perform, it was observed that the student teacher had only 25 periods - a bare minimum number of teaching periods per week. Otherwise a teacher should teach 30 periods per week, according to Government directives. This, according to the school head, was part of student support. Frank had a regular travel routine to the regional centre and to the district town centre for meeting other students and visiting the library and the internet. Some of these trips were funded by the school head for they might have required the student teacher to perform some official duties as well, while in town. The travels were actually reflected in the student diary in which he had recorded that during a week he had travelled to the regional town and spent the whole day there. He also had travelled to the district town centre half a day during the same week. Asked about the travels the student teacher said that they were both paid by the school because he was in principle, performing official duties.

He still pressed the need for OUT to have study materials ready by the beginning of the year, even if it was a single copy for students to make some photocopies out of. He also challenged the Ministry to extend sponsorship to include not only tuition fees, costs for science practical and intensive face-to-face but also accommodation during examinations, stationary and travel costs to meeting centres. Otherwise, he made an appeal that:

> *Towards the end of the face-to-face meetings, students should also be allowed to do tests and examinations for the covered courses, so as to reduce costs and time spent for having to travel separately for intensive face-to-face meeting and then for the tests and examinations (Student teacher interview).*

In April 2008, SMS contacts with the student teacher revealed that he was making good progress with his OUT studies. He had attended the second face-to-face meeting in November 2007 and had done all the examinations for the first year. He reported having done teaching practice in March and April 2008. His concern was that the TP exercise had been done in a way that he had not expected. He had initially thought his school would be used for the supervised teaching practice, but he, and many other student teachers in the rural areas, had to temporarily relocate during the TP period. He had to perform the supervised teaching about 100 kilometres away in the regional town. The whole exercise added costs

in that he had to spend days and nights in the town where visiting OUT lecturers could easily observe and assess him, without them having to go all the way to rural places.

> *The trouble with TP is that you have to be at the practising school throughout all the TP period. You have to be in school everyday even if you do not have to teach in some of the days. Be there and get experienced to the job, as they put it (Student teacher's phone call).*

8.3 *Madukani High School*

8.3.1 General background

Madukani Secondary School is a case study of a high school in a rural town in Southern Highlands of Tanzania. The school started in 1983 as a community school. It was later made a high school and re-registered as a Government school. The school has about 700 students and 26 teachers. Eight of the teachers are university graduates. Sixteen teachers, the majority of the teachers, are diploma holders. Two teachers, including Donald the LTP student teacher, are untrained and they work as licensed teachers.

Madukani is a boarding school for advanced level students and day school for ordinary level students. This arrangement, according to the school head, presented a challenge particularly to teachers on duty. He was of the opinion that LTP students who happened to be in such schools with boarding facilities could be both advantageous and stressful depending on the type of management. It could be advantageous to the beginning teachers in that at least during the initial days the teachers could be assisted with food and accommodation using mainly the facilities available for the boarding students. It could be stressful in that a boarding school is normally a busy place with more administrative duties given to teachers. In such cases, the teacher students might be deprived of study time.

The head of school, who had worked as a teacher for about 29 years and a school head for the past 15 years, said he would like to see the LTP students (and other untrained teachers) as a student first and as a teacher later. As such he has been sparingly allocating responsibilities to the LTP student so as to maximize his study time as well as giving the student teacher enough time to learn activities in the school, before he can be given full responsibilities.

Donald taught mathematics to ordinary level secondary school students. He had a workload of 24 periods per week, a bare minimum of the Ministry's recommended 25-30 periods per week. The head of school's perception on the LTP student teachers was one that opposes the untrained teachers assuming full school responsibilities as if they were trained. He said:

> *We* (heads of school) *have discovered that these untrained teachers assume that they are as good and as deserving as the trained ones. They have caused trouble in some schools by involving themselves in school politics against school management. They have to be put under close supervision and proper upbringing until they graduate.*

Departmental discussions could be a rather difficult idea in many new schools where the only teacher in a department is common. However, this study was able to find evidence that such discussions could be of great use particularly to new teachers. In this case school it was reported that departmental discussions were regularly convened to discuss various teaching and learning and administrative issues. It was reported that professional development for the teachers in the department was conducted through departmental discussions led by teachers who happened to attend some external training sessions. The mathematics and science teachers in the country were undergoing a national training programme to improve the teaching and learning of the subjects. Donald, the LTP student teacher, was based in the maths department.

If there is a single achievement Donald's presence in this school had made, then it should be the fact that he had managed to inspire the other licensed teacher in his department to register for OUT studies. Upon his joining the school, he had met this colleague who could not get the motivation to join studies. He said he was afraid of difficulties in studying by distance learning. The presence of Donald had become a relief to him. He decided to register on identical courses for ease of sharing materials and information. In and around the town there were about five secondary schools some of whose teachers were OUT students. OUT students met weekly in a teachers' resource centre. The centre has grown into a 'community centre' for OUT students where they discuss all issues involving their respective subjects and their collective issues such as availability of study materials etc. In the case of mathematics, Donald and four other student teachers met on Saturdays with a variety of prepared activities for discussion. They had a timetable that showed a sequence of discussions and leaders of the discussions. Each student teacher would have at least one topic to prepare and present before the rest. As such student teachers in the discussion group could also develop their presentation skills.

8.3.2 The LTP student teacher

Donald was 21 years old when he joined teaching and OUT studies in the beginning of 2007. He had just graduated from high school. He said he was a second born in a family of five. The family had always lived in a rural area in the Southern Highlands of Tanzania, earning their living mainly through subsistence farming. Two younger brothers were still in school and they were still costing Donald's parents. The other two siblings were relatively independent having decided to engage in some petty

businesses. In high school Donald had studied economics, geography and mathematics plus a compulsory general studies subject. He successfully graduated with 12 points (second division) with a subsidiary pass in general studies, a D in geography, an E in advanced mathematics and a C in economics.

After high school, Donald had wanted to continue with further studies although with his pass level he could not possibly get Government sponsorship. The Government policy was to sponsor only those high school leavers with a first division, if male; and up to second division, if female. There were still some other options for him to access higher education though. He could either register as a private sponsored student, in which case would have to pay for tuition fees and all other expenses on his own; or look for a job, earn some money and register for a course with OUT.

He decided to apply for admission in both public and private universities. There was still a chance for Donald to continue to university with such a pass level. He had learnt not to despair. He had heard for example that science students were more likely to get sponsors to pay for their tuition fees. He had heard stories of additional funding by the Government to include all applicants with at least a second division, regardless of gender. In any case he was going to submit an application form, get admission, and then see how the funding problem resolves. But he soon accepted employment as a teacher. The teaching job package had presented itself so tempting that Donald could not see any better option. He was to be sponsored by his employer for a degree course in education by DL with the OUT. In addition, he was going to receive his salary as a normal employee. In his view

> *Choosing to study through the Open University was the single most crucial decision I have ever made in my life. I sometimes question myself for having taken such a gamble.*

The teaching job offer was eventually going to make Donald feel independent for the first time in his life. He would now be seen by his family members to be doing something and probably helping the parents with the younger brothers. He was delighted that earning would not compromise his ambition to continue with studies. However the teaching job offer presented three major challenges: he had to learn to be a teacher, a job he had not thought of before. In fact he had wanted to be a business manager, not a teacher. Initially, teaching in a high school presented all sorts of challenges, from minor administrative issues to classroom teaching. He recalls the first day when he reported at the reception with his luggage, the teacher on duty, misled by Donald's physique, assumed he was one of the students, and asked him to pay tuition fees first before registering him! It was only after Donald had explained that he was one of the new teachers that he was treated accordingly.

The mathematics department in which he was assigned had four other teachers. One of the teachers, who happened to be the head of department, was a university graduate, two were diploma holders and one was a licensed teacher – a high school leaver like Donald who had been employed the previous year. He says he felt lost and powerless. He could understand only a few things gathered from his four weeks induction in college. Things like following the protocol by reporting to the head of school, behaving and obeying authority, punctuality, working in a team with other members of the department, and that sort of things. He also could recall briefings on preparing schemes of work, lesson planning, classroom management and lesson evaluation. He says all that seemed jargon that would take ages to live by.

Another challenge was to learn to be a distance learner. He had only heard of people learning at a distance, particularly older people who had had too many responsibilities to stay on campus. He had never imagined becoming one of them, at least not at that age. By the beginning of the first term of 2007, Donald was supposed to register as a student of the OUT. He says there was little information on how to undergo the process because during the registration, there was little assistance from OUT. Even when he eventually decided to visit the OUT regional office he could not get much assistance as it seemed there was no official directive on the new programme. He was to rely on other OUT students on much of what he managed to do at the registration stage. The first face-to-face meeting organised by OUT was not ready until April. Only then did he realize that he was supposed to have registered for at least 16 units for the first year if he was to keep the pace for a three years programme, contrary to only 14 units he had registered for. Only if the first meeting had been organised earlier such misunderstanding should not have happened.

The third challenge was mastering the two new 'careers' at the same type. If Donald had felt teaching and learning at a distance were challenges, then he was soon to realize that the real challenge was posing as a teacher as well as a student at the same time without compromising either of the two. Things were not going well with his studies. Apart from the misunderstanding experienced during registration, Donald had to face yet another disappointment: he had not received some of the key study materials for his mathematics courses. The study materials, he was told, were out of stock. Another disappointment for Donald was to be experienced during the examinations in July-August. He and many other students had assumed that the sponsor would cover the costs for travel and accommodation during examinations, this was not the case. He had to spend his own money, and

thanks to the head of school that had assisted him, he had to take a loan–an advance payment from school so as to meet the cost.

By mid 2007, when results for conventional universities' admission were released, Donald had finally got a chance to escape from this rather unpromising endeavour, but he chose to stay. There are several issues to consider regarding Donald's reasoning and decision making. Donald, unlike many LTP students, had been posted to a high school in a sub-urban area. He said he liked the place and the facilities available. He believed life in the area was manageable for he could afford to get cheap accommodation, and all amenities were cheaply available. He could access the internet through several internet cafes available in town. He could arrange travel to any part of the country from this town using the readily available public transport – the train and buses. In addition, the telephone network was reliable.

There is also the cost factor, both real and opportunity. If Donald had decided to join the private university then he would have to pay for tuition fees and all other costs. He could probably receive a student loan from the Student Loan Board, but the loan is normally not for the full cost of study. The rest of the money should be paid by the student. Donald would further lose his monthly pay he had been receiving since the beginning of the year. He could once again turn to dependence on parents and other relatives for at least the following three years.

By the beginning of the second year of study, Donald had already received some impressive results for all assignments and tests he had done for the first year. Results for the final examinations were not yet received. He had registered for two more units to cover those not covered in the first year. He was generally happy with the support he received from the school, and even happier with the OUT support.

8.4 *Mnadani Secondary School*

8.4.1 General background

The history of the school begins in 2003 when a district-based non-governmental organisation mobilised community members from two neighbouring wards to build a secondary school. The initiative received a positive response by the members who hurriedly put structures for classrooms and several teacher houses so as to make it possible to have the first Form One students admitted in 2004. The school was registered as a private school. In 2005 the school was reregistered as a government school following SEDP initiative on community schools. Upon re-registration, the school not only changed its name but also lost its teachers who had been employed by the initiating NGO.

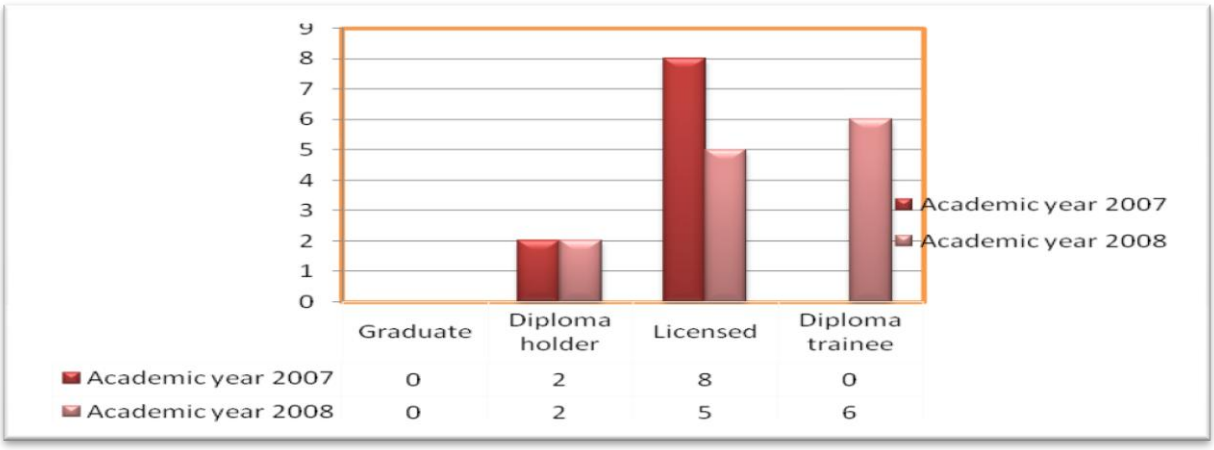
The school was found located about six kilometres west of the main village and main road. Most students and teachers have to walk or cycle the kilometres every school day, to and from the school. Some other students live in villages several kilometres further west of the school. The school did not have electricity nor did it have a water supply. It lacks some basic teaching and learning facilities such as books, laboratory equipment and chemicals, desks and chairs. It lacks some basic buildings which according to the head of school will have to be constructed as a matter of urgency if the school is to be in a fair competitive environment with other schools. The buildings include classrooms, offices and science laboratories.

With exception of the head of school, all teachers had joined teaching in almost the same period between 2005 and 2007. In terms of teaching experience therefore there were not enough experienced teachers in the school and particularly in departments. In terms of teaching qualification the school had had no graduate teachers since its registration. The head of school was one of two diploma holders in the school, the only teachers with a minimum teaching qualification at secondary school level. The other diploma teacher was the assistant head of school. The school head explained that school realities have had a negative impact on the school performance.

> *To be frank, with our performance average of between C and D since 2005 up to 2007, we have been among the lowest performers. We have had poor examination results. We have not been able to send many of our school completers to high school. This is a result of few books, a simple laboratory we use, desks and chairs bought out of students' fees. Because of lack of suitable laboratories, our students have had to take alternative examinations to practical examinations in sciences. By experience the alternative examinations are more difficult than the practical ones* (School head).

When asked about mentoring given such realities, the head of school explained that the school did comply with the Ministry's directive on having school-based mentors. The directive required heads of school to appoint one qualified and experienced teacher to play the role of school mentor for the untrained licensed teachers and other new teachers. The heads of school were required by the directive to train the mentors and manage their mentoring process. To this effect the head appointed the other diploma holder as a mentor but with a close supervision and guidance from the head himself.
With the emergence of school-based teacher training for diploma teachers, schools were also reminded of having school mentors to assist the new diploma trainees. In 2007 the school had eight untrained teachers out of a total of ten. They were all employed under the SEPD licensed teachers initiative. By 2008, the school had 13 teachers as shows in Figure 8-3.

Figure 8—3 Teachers in 2007 and 2008



While at Maendeleo and Madukani cases LTP students and untrained teachers were given responsibilities in a cautious way such as providing them with a minimum workload, the head of school at Mnadani disagreed with that notion. He pointed to the fact that particularly new schools had almost all teachers untrained and inexperienced. It would be absurd to provide them with minimum responsibilities when there are few trained teachers in the school. But a more convincing reason given by the school head was that schools would be ineffective in getting new teachers integrated in the teaching profession if the new teachers would get the impression that they were being mistrusted, and singled out as less important. He said the school issued identity cards to all teachers regardless of their being trained or not. The school provided a salary advance or loan to all beginning teachers regardless of their qualification status. Most importantly the school discouraged any unnecessary labelling of the untrained teachers as 'untrained' when making introductions to students and to the school community.

LTP student teachers and all untrained teachers in this school were treated as equals of the trained ones. They were the majority and the ones who made the school run for the previous two years. They had full responsibilities as academic masters, discipline masters, school project managers, and all other titles that would be granted to senior and qualified teachers in established Government and private schools. Anna, the LTP student, was the school matron.

Participation in teacher development meetings (TDMs) could be an important feature of teacher professional development. It was encouraging that Anna, the only LTP student teacher in the school, had been involved in the cluster TDMs. She said she had once attended a TDM for science teachers for two days in April 2007. However, a unique innovation by the school head toward addressing the challenge of having the majority of teachers as untrained and inexperienced is a form of TDM called

Changamoto ya leo (Today's Challenge). This is a tradition in which teachers have to sit down for the purpose of discussing classroom practices. The way it operated is that a topic was introduced during staff meetings on a particular teaching and learning issue and all teachers would participate in the discussion. The '*Changamoto ya leo'* initiative is unique and fun. A topic is written on the blackboard in the staff room and a discussion leader, normally an experienced teacher, guides the teachers in exploring the problem to a solution. I was present at one of the discussions during which a very interesting challenge was under discussion. The challenge was getting ideas on a situation that a teacher may find in, a hypothetical situation though. It went like this:

> *A supervised trainee teacher's class is at the middle of the lesson when a helicopter lands on to the school grounds just outside the classroom. The students are mad running out of the room so as to admire the rather rare thing they have only watched it fly in the sky before. The college supervisor is seated still keenly watching the new teacher's reaction to the situation. What would you do if you were in the new teacher's shoes? What reaction would you expect from the teacher if you were the college supervisor?*

The discussion covered a lot more issues involved in classroom management. In a much crafted way, the discussion leader began by asking the teachers to think of some common classroom disruptions in the school that may ruin the flow of a lesson, some of which could endanger the life of students. He made the teachers recall the reactions they had taken on such disruptions; and if they had any guiding principles in their decisions. It turned out that a mostly appealing principle was to put safety of the students first and that the same guiding principle would necessitate the new teacher to follow the students outside and try to look after them. As for the college tutor the teachers were of the opinion that the tutor would appreciate the initiative by the teacher in taking a leading role outside the classroom than standing in front of an empty class.

By following Anna, we are introduced to another first year OUT students at the school. Anna admitted to have enjoyed having the head of school as a fellow OUT student. It is encouraging to learn that the head joined OUT studies as a result of the challenge he saw with LTP. In terms of support the school head was very willing to support OUT studies. In fact in 2008 all five licensed teachers had enrolled with OUT. Because the head of school had more regular travel to the regional centre for official duties it was easy for him to spend some time at the OUT regional office for study materials and current information from the notice board. The materials and information would be shared with other OUT students in the school. Anna received support financially during the academic year of 2007. Because the head of school was a student of OUT it was easy to explain the need for finance during face-to-face meetings and examinations.

8.4.2 The student teacher

At the age of 24, Anna had been employed by MoEVT as a licensed teacher. However, she had worked as a teacher in a private school in the same district, ever since she completed high school three years earlier. The previous school underwent a transition in 2005 through which it become a Government school forcing unqualified teachers like Anna to either end their employment or apply for a teaching license. She says she was unexpectedly asked to stay if she wished to work as the school had a shortage of science teachers, until she could get a place for higher education. She was glad to stay until the beginning of 2007 when she was employed as a licensed teacher and posted to Mnadani,. She found teaching more enjoyable than expected.

She enrolled with OUT in a degree programme B.Sc. (Ed.) studying zoology, botany and education. Responding to the question on attitude on studying through DL she indicated that she had found studying through DL less hard than expected, at least at the beginning of the first year when LTP students were asked to complete the questionnaire. She also indicated that she had been well supported by OUT and adequately supported by school.

Unlike many other teachers she was provided with school accommodation as she was appointed school matron responsible also for the girls' hostel. 'Housing is not a problem for me', she said and added, 'it's the workload'. She had to teach 48 periods per week as she was the only teacher for Biology and Chemistry. She had to take care of other administrative duties as well, including guidance and counselling of girls. Otherwise the average recommended teaching load is 25-30 periods per week.

OUT studies for Anna could be described as making good progress. When she first responded to the questionnaire in April 2007 she was very enthusiastic about teaching and similarly about studying through DL. Although she had indicated that she did not have regular support at school or from OUT she overall was satisfied by both OUT and school support. When I visited her in November 2007 she was still positive about the programme. She particularly commended the opportunity the programme had provided students to meet during residential meetings. She described it as a very useful opportunity when DL students meet each other and have both academic and social interactions.

According to her diary, Anna had a very busy week. While she had to spend eight hours at work during the day, she still had to study for another four hours every weekday. She would use Saturdays for OUT discussions during which she had to travel a distance to find a fellow student for discussion. Sundays

were for personal issues. She said much of the time she had to conduct self study because she had no other science students in the school area. She revealed that she enjoyed the face to face meetings because that was the only opportunity she had substantive discussions.

She had some negative observations however. Firstly, that she was a victim of lack of an efficient communication system. She particularly pointed out she had registered for 13 units in the first academic year instead of at least 16 that are required to keep pace with the three years graduation schedule for LTP. According to her there was no official guidance on how to register for the courses. Secondly she pointed out a delay on students' work feedback. She was unhappy with the fact that she had not received most of her assignment papers including Assignment One even as late as November 2007. As such there was no feedback on how good her writing style was and how she had generally performed over the year. Thirdly, she pointed out the distance to OUT study centres. She was of the opinion that OUT studies were becoming too involving because students had to use resources to follow services which could otherwise be available within a district.

> *Last month we had a district meeting during when we put forward an agenda to demand an OUT centre in our district. It has become a matter of campaign really. I do not see OUT putting services at district level, except in Dar es Salaam, where every district has an OUT regional centre. The same old legacy: urban means better social services (Student teacher).*

Lastly, she talked about studying science subjects at a distance. She described the process as one that required practical experiments most of which needed regular access to laboratories. OUT studies also required at least 20 supervised practical assignments to be completed by a science student. She had two concerns on this: one that the realities at her school made it almost impossible to practice various experiments at school. Secondly, that OUT had no laboratories mostly relying on other universities to have students perform the practicals. According to Anna, science practicals that were done in 2007 did not provide them much opportunity to have the required number of practicals. "*If I do not complete my studies in three years then the reason will be the science projects"* she said.

8.5 *Barazani Secondary School*

8.5.1 General background

Establishment of the school was a response to the Government directive that all wards should have at least one secondary school built by the community itself. By 2005 the school was ready to admit its first Form One students. The school is situated down the hill some six kilometres from the main road - somewhere agreed by the villages involved with the building of the school to be the midpoint of the

catchment area. The trouble with the midpoint in this case is that it is in the middle of wilderness. The village by the roadside probably has the majority of students because it has three primary schools all of which send their completers to the secondary school. It is relatively well positioned for access to reliable social services like transport, water and electricity. Transport is a very important factor to consider when posting teachers as most of services like banking, post office, internet, and shopping have to be obtained from towns.

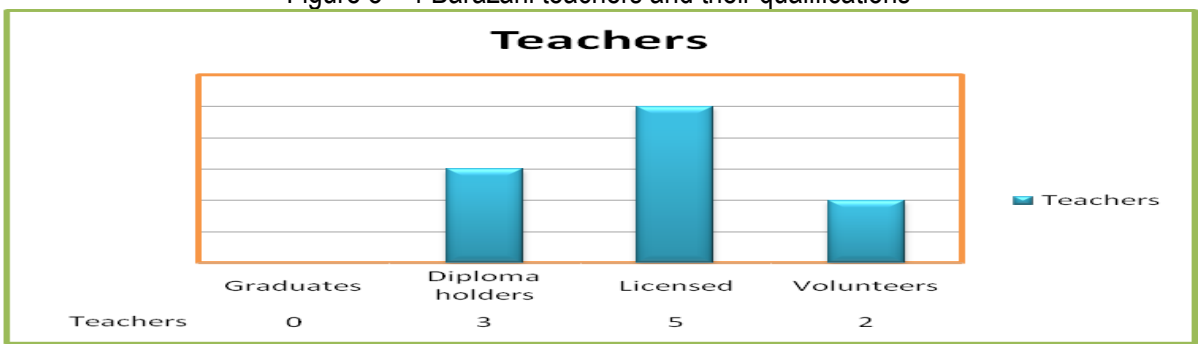
The nearest village from the school however would be the one on top of the opposite hill further east of the school about four kilometres away. The school is named after that village on the opposite hill, which also happens to be the name of the whole ward. The ward administration is also based in the village. Other services present in the village include a health centre, a primary school, a shopping centre, two churches, a Catholic and a Lutheran, and primary magistrate court. The problem with the village is that although it appears to be somewhere in the middle of the ward it is actually on periphery because it is situated about ten kilometres away from the main road – a road with reliable means of transport. There are other problems with the village on the hill, regarding social services. Unlike villages along the main road which have reliable water supply and electricity, this main village has not been able to renovate its old water network built during 'villagisation' in early 1970s and like many other villages further east, it has never had electricity.

The school had some structures for classrooms, some still under construction. There were two houses for teachers, one completed and was being inhabited. The other one was still under completion. You could not see any other house around the school. The surrounding area was covered by a pine forest on both overlooking hills. There was no student hostel. Literally, everyone had to walk to the school for at least eight kilometres (to and from). It does not matter which village or direction one takes, on the way home one has to walk or drag a bicycle for at least four kilometres. In other words, one has to avoid cycling to school unless it is alright for him or her to dismount the bike on the way home. That would be a daily and weekly routine.

The school had an enrolment of 400 students selected mostly from the ten primary schools in the ward. There were ten teachers as presented in Figure 8-4. All teachers, with exception of the head of school were new in teaching at secondary school level. Two diploma teachers had previously worked as primary teachers. Following a directive from the district authorities, all primary teachers with at least a diploma were required to move to the new secondary schools which were otherwise struggling to get teachers. This school was lucky to receive two of them. Five teachers including John, the only LTP

student, were totally new teachers when they joined the school. Likewise, the volunteers were fresh high school leavers.

Figure 8—4 Barazani teachers and their qualifications



It was established that teachers felt free to discuss issues with their fellow or senior teachers in departments and across departments. Teachers did not have to wait for official gatherings in order to ask or share ideas on teaching and learning of the students. Chance discussions seem to be important among settings that happen to have teachers of almost the same qualification and teaching experiences. Sharing knowledge, skills and experiences need to be nurtured among teachers. The LTP student teacher in this school had a very important point on this topic. To paraphrase the student teacher, *teachers should not be in position where they are unable to teach a certain topic or class simply because they feel they do not know exactly what they are supposed to teach*. He recalled various techniques he had managed to use in class which he had actually borrowed from others through discussions. Here is one of them.

When he needed to present 'Scramble for Africa' a history topic in Form Two, the new teacher sought ideas and came up with a funny way of illustrating the concept of 'scramble'. He came to the history class with a basketful of snacks towards the end of the day. The timing of the lesson was coincidental. *"Guys, here you are. The stronger you are the more you get. Don't pretend you are not hungry. Just get as much as you can before anybody else does!"* It worked. And that is the way he was able to introduce the topic on the 'hungry' Europeans who set out searching for business, cheap labour and settlement in Africa, but having to wrestle among them before the strongest could get the biggest share and the weakest nothing. He said the idea of having students genuinely 'fight' for snacks, was his senior teacher's who had initially given away his pocket money to a class with the same teaching effect.

John, the LTP student teacher taught 30 periods a week and was responsible for school projects, a post that would otherwise be for a senior teacher. What appears from interviews with the student

teacher is the sense of being trusted. It is true that when schools have no experienced teachers to assume responsibilities the responsibilities are taken by new teachers. What is being argued here is the impact of such practice on retention of the new teacher. He admitted that he usually felt tired at the end of the day because he had to teach, work with school projects and had to travel five kilometres back home. However he thought that he was being valued as being capable of performing. He could contribute ideas on issues regarding development of the school and be listened to.

John talked of the other OUT student, the head of school. He said the mere fact the head of school was a student like himself, was a great motivation. The head of school was in his last year of study. He had much experience on DL which John said he was willing to share. Coincidentally the head of school was also studying geography and history, which made it possible to use most of his study materials and reference books. Another advantage of having the head of school involved in the OUT studies according to John was that it was easier to get material support from school management. All LTP students in the cases schools reported that they were in a very serious financial situation in the 2007 academic year. John received a salary advance for the purpose of attending examinations. He said he believed that he was able to get the loan because the head himself was involved in the examinations. He said while some other OUT students had been complaining about having school management that was a hindrance to their studies, he believed the situation was different in those schools which had OUT students or graduates as heads.

8.5.2 The student teacher

In 2006 John graduated from a high school where he had been studying history, geography and English. His ACSEE results showed that he had been ranked at Division II with twelve points. He had had a D in history, a C in geography and an E in English. In 2007 he was employed as a licensed teacher and posted to this rural community secondary school. John taught geography, the same department as the other OUT student was based. That provided him a possibility to seek for support both academic and professional. In April 2007 when he responded to the questionnaire on school support he indicated that he received support from a fellow OUT student and OUT tutors. There was no school-based cooperating tutor because the cooperating tutors are usually graduate teachers. The school had no organized training sessions.

In November 2007 and November 2008, I visited the school, interviewed him, interviewed his head of school and visited his home. John lived in the village by the roadside. He rented some rooms in a house of one of the villagers. He said he had to do long cycling journeys down the hill to the school, do

the teaching and OUT studies. He also had to work in his vegetable garden every evening. Asked how he coped with teaching given that he was new and untrained, he responded that his being new and untrained was not a unique case because almost every other teacher in school was in more or less the same state.

> *You just have to do the job. You try to follow guidelines and set out to prepare the lesson and present it in class; see how it works out; and improve as days pass by. Most of the times you find yourself in uncertainties and you seek help or share your thoughts with another teacher.*

By implication at least four issues emerge as far as learning to teach is concerned: commitment and hard work, the role of induction, improvement through classroom experience, and discussing lessons. Commitment refers to qualities of a teacher who relies on the positive side of teaching without being let down by teaching challenges which unfortunately seem to be rampant in rural schools. If induction of new untrained teachers is well conducted it could be of great support to the new teachers. The teacher referred to the induction as teaching guidelines because that is what could best be done within a month of training: providing some basic guidelines on the practicalities of secondary teaching. The teacher also referred to classroom experience as a way to learn better classroom practice. However when new teachers are left to try things out without much support of more experienced teachers this could be regarded as jeopardizing student learning. The fourth issue raised by the student teacher is the role of lesson discussions and sharing ideas among teachers. The student teacher seems to have developed his personal strategy: to ask for assistance when in doubt, to communicate his views, and to improvise ideas from others.

As an OUT student, John did register for 16 units in geography, history and education. By November 2007 he had already done 15 assignments (A1), all 16 tests (TT1), 14 assignments (A2). He explained that he had a problem getting two assignments in education and one assignment in history. The assignments according to John were not at the regional centre. They were not available in the university website either. Lack of assignments followed lack of study materials for some courses. John revealed that some five course materials were not received as late as November. He was not sure whether the materials were simply out of stock or that the courses did not have study materials at all.

He also expressed his concern about the distance to regional centre and library services. He pointed out that study materials could be stocked at the regional centre, at least one copy of every course so that students could make their own copies in case the materials ran out of stock. Because library services are very far away, he went on to say, frequent visits to the service were impossible. The only period that could be possible was during face to face meetings, the service which he described as very

helpful. He talked of costs involved in being a student at a distance, particularly with LTP. He pointed out that although the Government was paying the tuition fees and taking care of costs involved in conducting face to face meetings, the remaining costs were far more burdening to the students. He referred to costs involved in travel, food and accommodation during examinations, for which the Government did not provide financial assistance. John had the opinion that students were not clearly informed about not attending examination venues otherwise conducted for the mainstream students, i.e. students not involved in the licensed teachers programme. Most results for the assignments, tests and examinations done in 2007 were still unknown to the student teacher as late as November 2008. He was concerned that if the missing results were not to be retrieved then he might unfairly end up having incomplete work.

8.6 *Conclusion*

Chapter Eight has presented four cases of secondary schools that were purposely sampled for phase two of this study. The cases included three O-level and one high school, all in rural districts. Useful information was collected from the cases for which the next chapter will report various issues emerging from the cases.

Chapter Nine: Cross-Case Analysis

To teach is to learn twice – Joseph Joubert (1754-1824) French author

9.1 *Overview of the chapter*

In the previous chapter, four school cases have been presented in which school contexts and support strategies for LTP student teachers have been closely followed. Chapter Nine will attempt to put together an analysis of all cases, highlighting what seems to be working for further recommendations. The idea is to capture best practices at school level that could be implemented in other similar school contexts. Chapter Nine begins with a conceptualisation of the observed practices by categorising them into three levels (as themes repeating from case to case): contextual and moral support, teacher professional development and support for distance learning. This categorisation is grounded i.e., it emanates from the data rather than from literature. The chapter moves further to present an analysis of observed challenges in implementing school-based support to student teachers based in schools. Finally, the chapter brings in some analysis of supervised teaching practice assessments made by OUT supervisors as a way of tracing professional performance of the student teachers followed in the case study phase of this research.

The four case studies revealed some factors that are important in addressing student support at school level. The factors were the school head, location of the school, availability of internet services, teacher collegiality, teacher development meetings, mentoring, peer discussions, peer tutoring, sharing study materials, study time, and financial support. Table 9-1 categories the factors according to the three levels of school-based support; namely, contextual and moral support, professional development and support for distance learning.

Table 9—1 School support across the school cases

Case	Contextual/moral support	Professional development	Support for DL
Maendeleo Secondary School	The head of school A rural town centre Availability of internet	Staff meetings Teacher development meetings Upgrading by DL Mentoring	Peer tutoring OUT book collection Assisted travels to study centre
Madukani High School	A rural town centre Availability of internet	Departmental meetings	Minimum workload Peer tutoring and support Assisted travels to study centre
Mnadani Secondary School	The head of school Teacher collegiality	Cluster-based TDMs *Changamoto ya Leo* sessions Full responsibilities	Peer support (Creation of a majority community of DLs) Assisted travel to study centre
Barazani Secondary school	The head of school	Peer discussions Full responsibilities	Peer support (OUT material sharing) Assisted travels to study centre

9.2 *Contextual and moral support*

Realisation that new and untrained teachers need encouragement to overcome the transition into the teaching profession could make a difference in the new teachers' decision to stay or drop out of teaching. The same underlying principle applies to teachers studying at a distance who are based at school. Case studies of supportive schools presented in the previous chapter revealed this notion of contextual and moral support in different ways.

The head of the school: There was a constant reference to a supportive head of school as a factor for student progress in their studies. Although quantification of any support checklists would be difficult the general feeling of a supportive head was one who is "not too demanding". Analysis of the cases revealed at least two versions of a school head who is not too demanding. One is the head who treats the student teacher as a student, not as a teacher and thus supporting the latter to graduate. This could be represented by the head of school at Madukani High School who revealed that he would like to view untrained teachers undergoing studies as students first and teachers later. He would prefer providing them with support for them to graduate first after which they will be integrated in the school system as teachers. The head's perspective does not differ much from the general public on teacher education. They would like teachers trained first in college and only then be allowed to work as teachers. Unfortunately this view leads to resistance among trained teachers who do not accept the untrained into their profession. The two heads who insisted on supporting LTP students to graduate first were

both established heads with headship experience of over 15 years each (The heads of Maendeleo Secondary School and Madukani High School). However, their perception of the status of student teachers could be influenced by the type of school since both schools were relatively established and with large numbers of experienced teachers.

Another version of the "not too demanding" head of school is that which consists of heads who deliberately integrate the student teacher into the school life without being bound by professional limitations. This treatment was well elaborated by the head of school at Mnadani who explained that the new untrained teachers deserved the same treatment as other teachers in the school, with the only exception of inclusion of the untrained teachers to those activities stipulated by the Teachers Service Department as exclusive to members of the TSD i.e. the trained and registered teachers. The activities that untrained teachers are not legally allowed to get involved in are those to do with setting, invigilation and marking of national examinations. In the view of the head of school, untrained teachers are sometimes unfairly excluded in some basic activities like organised teacher seminars under the guise of the TSD rules. In the case of Mnadani all teachers were treated equally in terms of opportunities for training, to financial assistance and to reference as teachers.

Location of the school: All cases were rural schools, some in very remote locations. The four cases included two new schools, Mnadani and Barazani, both built in isolated locations where there were no basic social services. As typical examples of the new community schools built recently, the schools did not appeal to many new teachers. The fact that the new teachers involved in this study were retained by the end of the first year of teaching should be understood in the context of other school factors such as school head and teacher collegiality in the school. However, geographical locations for Maendeleo and Madukani were supportive in that they were both in town centres where basic social needs could be easily accessed. In addition, in both locations there were internet services viewed as very important for studying at a distance.

Teacher collegiality: Resistance against untrained teachers seems to have made a case for lack of moral support for the licensed teachers who were otherwise struggling to start a new life in a teaching career. As also reported in Chapter 10 (the story by Teo, the dropout) there seems to have been cases of 'club resistance' against untrained teachers. Evidence from case studies revealed that there was a sharp difference in recognising teacher identity of the untrained teachers in O-level schools and high schools. At Mnadani Secondary School, teachers regardless of their qualifications were provided with teacher identity cards. The teachers were so introduced and addressed without any unnecessary labels

such as 'licensed', 'untrained', 'school leaver' and the like, which were reported to have been a norm in other schools. However, that was not the case in schools such as the Madukani High school where teacher categorisation according to levels of qualification was confirmed. The teacher identity issue seems to have raised a concern particularly when partial or full responsibilities were being granted to the licensed teachers. In some schools, the licensed teachers were granted full responsibilities as teachers. They were provided a full teaching load and some administrative duties. In some schools, especially high schools, licensed teachers were not regarded as teachers, but as teacher trainees. As such, they seem to have been provided with minimal responsibilities and generally treated as unequal to the trained teachers.

Other teachers in the department and in the school: new O-level schools had mostly one teacher teaching a subject to the whole school. The schools had a majority of teachers untrained and inexperienced, as shown in the four cases. These basic facts made it difficult to implement any sort of formalised mentorship. On average, while in the three O-level schools the untrained teachers made a majority of about 80%, the untrained teachers in the only high school involved in the case study, the untrained were a minority of two (10%). In terms of psychological set up the untrained teachers in O-level schools seem to be more established and more confident than those in the high school. They could easily absorb any intimidation based on their qualifications. O-level schools, unlike high schools, also seem to have had heads of school that are either OUT students or OUT alumni.

9.3 *Support for OUT studies*

An opportunity for sponsored higher education could have been a motivation to many high school leavers to join teaching, (refer Donald's case). However if the promise of higher education is not fulfilled then dropout is more likely. The study discovered different strategies through which schools were actually supporting school-based distance learners.

Peer tutoring: The case of Maendeleo Secondary school presented some useful information regarding peer tutoring. The school had a mixture of graduates and current students making it possible for students in lower levels to seek support from seniors and graduates. However it was observed that arrangements were made informally. The peer tutoring at Madukani High School presented yet another form of understanding. When student teachers were given a tutoring task on a certain topic they were required to actually prepare the lesson and teach the other members of the group. This strategy helps not only in learning the subject being taught but also provides an opportunity for the beginning teachers to practice teaching.

OUT book collections: a self-help initiative was discovered at Maendeleo Secondary School where OUT graduates had donated their OUT-related study materials to the school library so that other teachers could use the materials if they wished to join OUT. The initiative mainly by the head of school who was a graduate of OUT, proved to be very useful particularly at the time when other OUT students were reporting delays in getting study materials. A less developed, but similar strategy was observed at Barazani School where the LTP student was using some study materials provided to him by a colleague who was in the final year.

Financial support at school level: It has been observed earlier that the 2007 LTP academic year lacked clear sharing of information between the programme coordinators and the Ministry on one hand and the LTP students on the other hand. Students saw themselves having frequent travels to face to face meetings, to examination centres, to regional libraries and regional centres, and similar travels, only to learn later that they actually needed not to attend to the examination centres. Unfortunately they did attend the examination centres for about a month long costing them more than what they could earn from their salary. The immediate support was from advance payment from the employer or any financial assistance from the school.

OUT student groups: The sense of being in a group could better be explained in psychological terms than any other perspective. It could be the sense of belongingness to a group of higher education students that distinguishes the students from the rest of the teachers in the school. It is this very sense of belongingness that could be bringing about fear among isolated students for not knowing what is going on among the rest of members of the larger group. When students were asked to describe support at their workplaces they usually ended up talking about having a study group, or having a discussion group, or having other OUT students with whom to share ideas. What appears to be the advantage of having another OUT student in school or within the school area could be the fact that the students could share the vision and objectives as students and be able to share information about the university. The study established a variety of student groups through following the cases.

Student groups with the same year of study: the impact of LTP on OUT enrolment was that most first year students in rural schools were either in the LTP or they were the untrained teachers employed together with those LTP students. As such the student teachers had a strong bond and shared the fresh study spirit they had carried directly from high school. Donald's case (Madukani High school) is one of them. In some cases like the case of Anna (Mnadani School), the group also comprised of the

head of school studying in his first year, literally feeling the pressure of being a DL student just like the new teachers in the school.

Student groups formed by OUT students of the same programme of study across different years: This kind of group is what normally is referred to as a study group, through which students share courses and hence have the same issues to study, discuss, write assignments on, and do the same tests and examinations. With regard to LTP there were no students within the same programme at the same school.

Student groups with different programmes: it was the commonest form of student groups. They were formed by for example two LTP students one a B.Sc. (Ed.) and the other a B.A. (Ed.). Although they could not share materials on their teaching subject courses, they could still share materials for courses in Education and other general information regarding administrative issues.

Student groups with different years of study: this kind of group is what was referred to as 'cross-level assisted learning'. Those LTP students who found themselves posted to schools with OUT students already studying in their second, third, four, fifth or sixth year had the opportunity to enjoy support in terms of materials, tutorials and study guidance. Evidence has been drawn from Maendeleo and Barazani schools.

Student groups formed across a cluster of schools: some students referred to groups by pointing to students from other schools. Anna for example (Mnadani School) was forced to form a group with science students in other schools. The fact that student groups existed in schools could only be associated with student retention in general terms. Some specific cases however suggest that some students could not be retained regardless, due to various other reasons. Cases of Davis and Neema (in Chapter 10) for example both dropouts had other OUT students in their schools suggest that there were more pushing and pulling forces.

Assisted travel to study centres: At least in one school the student teacher reported being assisted to have regular travels to the regional study centre. In a week it was reported that the student teacher at Maendeleo School had travelled twice to the study centre at the school's expense. It has been observed further that student teachers in all case schools had been supported financially to attend examination centres in June 2007. Although that was a loan, it could be appreciated that the heads of school were all supportive at the time of need.

Minimum workload: It was observed that providing more study time by means of reducing workload was one of the support measures in schools. However as observed from the four school cases this initiative seems to have two challenges. The first challenge was scarcity of teachers in the schools and departments. For example, Anna had to teach 48 periods a week and do some other administrative chores as the school matron. The recommended periods per week were only 25-30. The fact of the matter is Anna was the only Biology teacher.

The second challenge was what the head of school at Mnadani referred to as 'treating untrained teachers as teachers'. There appears to be a very fundamental concern on how to categorize licensed teachers and hence how to allocate duties to them. It was learned that in some schools, particularly high schools, where well trained teachers comprised the majority, licensed teachers were treated as trainee teachers and thus they were allocated a bare minimum of the workload and with less administrative duties like teacher on duty and class master/mistress. Advantage is that they then had more time for their studies. However, teachers in this kind of setting seem to have found themselves marginalised, as will be presented in Chapter 10.

On the contrary, licensed teachers in O-level schools were treated as teachers, because in principle they made the majority of teachers in the schools. They had to assume all teacher responsibilities from senior academic masters, discipline masters, school project managers, school matrons, heads of department, and class masters. Surprisingly the new teachers in this category seem to have gained confidence and developed a feeling of acceptance, as pointed out above, despite the extra work.

9.4 *Teacher professional development*

Although the formal system of teacher professional development in rural new schools seem to be a premature concept, there is evidence that informal school initiatives to develop teacher practice has been in operation. The following are initiatives explored through this study.

Mentoring: It was observed that mentoring in all case studies was a new concept that was not fully grasped. At Maendeleo, it was reported that the heads of department were playing the role of mentors to all student teachers and beginning teachers. Their role was to be integrated within the framework of their day-to-day responsibilities. The justification for such an arrangement was that schools were not provided with additional resources to recruit and train mentors. At Madukani High School, the head of school revealed that teachers were usually too busy with their teaching to be coaching the beginning

teachers. Otherwise the one to one support arrangements as known to be the case in a mentoring relationship were not identified in any of the schools. In fact some student teachers themselves reported that they had not noticed any unique support from the heads of department or heads of school.

Teacher Development Meetings: one form of teacher professional support that was widely practiced was the TDMs. TDMs are training sessions organised by teachers themselves according to teaching subjects. They are usually organised in collaboration with other schools in the district. Attendance to such training sessions is very useful in building professional capabilities among teachers. Two student teachers in the case studies reported to have attended such training sessions. A different version of TDMs was discovered at Mnadani Secondary School where the school had initiated a training programme called the *changamoto ya leo* (Today's challenge) session, a training session on basics of teaching. It was interesting to note that reference materials used in the sessions were OUT study materials provided by the current OUT students, a testimony of a direct impact of distance learning on day-to-day life of student teachers based in schools.

Staff meetings: a slightly different approach was adopted particularly at Maendeleo Secondary School where general staff meetings were used for discussing teacher professional issues. It was revealed that the school had official staff meetings three times per week. The head of school was of the opinion that although staff meetings were mainly for administrative issues the frequent teacher gatherings were essential particularly for beginning teachers to get integrated into the school mission.

Teacher up-grading: one similarity across the four case studies followed was the fact that in all schools there were other teachers studying in the DL mode. Many more were being inspired by the LTP student teachers. Of particular interest was the case of all untrained teachers at Mnadani Secondary school (five of them) who decided almost collectively to join OUT studies in the 2008 academic year after being encouraged by the progress made by Anna the LTP student teacher in the school. The support role in this respect was that the OUT student was supporting the school community to acquire an upgrading attitude. A similar episode could be told in the case of Donald the LTP student teacher at Madukani who inspired the only other untrained teacher in the school to join OUT in the very same academic year of 2007.

Full responsibilities: While at Maendeleo and Madukani schools LTP students and untrained teachers were given responsibilities in a cautious way, like providing them with minimum workload, the head of

Mnadani School disagreed with that notion. He pointed to the fact that particularly new schools had almost all teachers untrained and inexperienced. It would be absurd to provide them with minimum responsibilities when there are no trained teachers in the school. But a more convincing reason given by the school head was the very approach of getting new teachers integrated in the teaching profession would be questionable if the new teachers would get the impression that they were being mistrusted, and singled out as less important. LTP student teachers and all untrained teachers in this school were treated as equals of the trained ones. They were the majority and the ones who had run the school for the previous two years. They had full responsibilities as academic masters, discipline masters, school project managers, and all other titles that would be granted to senior and qualified teachers in established schools. At Mnadani, the LTP student was the school matron. At Barazani, the student teacher was the school projects manager.

Departmental discussions: Departmental discussions could be a rather difficult idea in many new schools where subjects were found to be taught by a single teacher. However, this study was able to find evidence that such discussions could be of great use particularly to new teachers. At Madukani High school, it was reported that departmental discussions were regularly convened to discuss various teaching and learning and administrative issues. It was reported that professional development for the teachers in the department was conducted through departmental discussions led by teachers who happened to attend some external training sessions. The mathematics and science teachers in the country were undergoing a national training programme to improve the teaching and learning of the subjects.

In all cases it has been established that teachers felt free to discuss issue with their fellow or senior teachers in departments and across departments. The point is, teachers do not need to wait for official gatherings in order to ask or share ideas on teaching and learning of the students. Chance discussions seem to be important among settings that happen to have teachers of almost the same qualification and teaching experiences. Sharing knowledge, skills and experiences need to be nurtured among teachers. LTP could prepare students to take up and seek out opportunities like this.

9.5 *Challenges in teacher learning*

Separation of theory and practice: The notion of '*theory first, practice later'* could be captured from several utterances by school heads and student teachers alike. At Madukani School the head of school had the opinion that the LTP students were basically students, not teachers. They were supposed to learn teaching first and then become teachers later. He observed that the current approach to integrate

learning and teaching was chaotic because the "*untrained teachers think they are as good and as deserving as the trained ones causing trouble and involving themselves in school politics*". He went on to assert that he would wish to see them as students first and teachers later, for they needed to strive to graduate first, and thus he preferred providing the LTP students ample time to concentrate on their OUT studies by minimising their workload. The head teacher did not seem to appreciate that teaching practice was part and parcel of the process of not just becoming a teacher but more importantly becoming a competent teacher. A contrary view however was expressed by the head of school at Mnadani School who saw such approach as minimising the workload of untrained teachers as unrealistic in most new schools, because the untrained teachers in such schools were the only teachers the schools could afford. The best approach, according to the head, was to recognize the untrained teachers as teachers, avoid labelling, and support them to learn to teach as they study for the required qualifications.

There was a clear need for designing training programmes to integrate the daily practices at school in the course materials such that students' activities are perceived as part of, and reflected in the student teachers' academic progress. This would require for example writing teaching portfolios, teaching reports and assessments done by heads of department and heads of school.

Heavy workloads: The head of school at Madukani School had a view that the trained and experienced teachers in schools were too busy with *'their teaching job'*. "*Teachers are too busy to be coaching them".* At Barazani School the head of school reported, "*We do not have regular paired teaching here because every teacher is always busy with teaching"*.

Shortage of experienced teachers: As noted earlier, shortage of experienced teachers particularly at the new schools was evident. Most of the teachers were new. However this fact gave rise to another way of teacher learning: instead of learning from one another, worked together for a solution. A good example was the "*Changamoto ya leo* sessions at Mnadani Secondary school.

School infrastructure: At Mnadani Secondary School, the student teacher observed that lack of science laboratories was a negative aspect for her science studies. Her observation was supported by the school head who admitted that the school had opted for theory instead of practicals due to lack of laboratories. Understanding that teacher learning occurs when the teachers perform is an important finding as far as school-based teacher education is concerned. The student teacher associated her teaching in laboratories as key to her own learning of science. Unfortunately, poor infrastructure in

schools was one of the reasons that forced student teachers to take such defensive options as "*if I do not graduate, then it will be because of the practical projects".*

Lack of collegiality: One of the remarks made by one official interviewed in this study was that most school heads in rural areas were not graduates and as such they perceived LTP students who were learning towards a degree, as a threat. "*They see LTP students as a threat hence they discourage them*". He associated his assertion with the fact that in most schools whose heads were non-graduates higher education graduates were discouraged from returning to their former schools. However through the case studies, it was established that indeed there was a reaction, but a positive one. At Mnadani School for example, the school head, who was a non-graduate, reacted by enrolling himself for a degree programme.

Analysis of the questionnaires revealed further that having in school a majority of graduate teachers could be a negative motivation for teacher retention, due to 'club resistance' . Particularly in high schools, untrained teachers seem to have been stigmatised and subjugated by the trained ones, especially graduates. An email from one email respondent revealed, "*Kuna makundi ya walimu kulingana na kiwango cha elimu* [There are groupings of teachers according to levels of qualification]" with most opportunities being set aside for the graduates.

9.6 *LTP student teachers' classroom performance*

This final section brings in data obtained from TP assessment forms for the student teachers who were followed in the case study phase. The aim of the section is to gain some impression of teaching performance of the student teachers. Student teachers followed during case studies were four and the total number of their assessment forms was 15; as shown in Table 9-2:

Table 9—2 TP assessment forms

Name of student (and school)	Subject 1	Number of assessments	Subject 2	Number assessments	Total
Frank (Maendeleo)	History	2	Kiswahili	2	4
Donald (Madukani)	Maths	2	Maths	2	4
Anna (Mnadani)	Biology (Zoology)	2	Biology (Botany)	2	4
John (Barazani)	Geography	2	History	1	3
Total		**8**		**7**	**15**

Table 9—3 Factors affecting teaching performance

Factors affecting teaching performance	Number of comments	Examples of factors identified
Teacher personality	2	"The teacher was alert, confident, charming and motivated. He was very well organised" "Late arrival to the class. Is it that you did not hear the bell or what?"
Teacher creativity	2	"Within a short period of time you have improved your teaching method by applying a variety of procedures including group discussions and adequate blackboard use. I was impressed by your using old calendar as flipchart with illustration at the back of the calendar".
Infrastructural limitations	5	"Type of desks not conducive for group discussions"
Teaching methods	2	"The use variety of activities such as display of visual aids vivid examples etc was well demonstrated. The class was split into seven groups each with various themes for discussion and to report to the fellow students and to discuss later. This was successfully done and the class was active throughout the lesson". "Normally teaching is a two-way process as you know. Your lesson was more than 70% teacher talking".
Class management	1	"Lack of class control. The class was a bit noisy with no attention being paid to by the teacher"
Medium of instruction	2	"Language problem on the side of students"
Other factors beyond control of the teacher	1	"Active atmosphere is always expected in the teaching-learning situation but may be this lacked due to hunger and fatigue"
Total	**15**	

As shown in Table 9-3, most observed limitations on teaching performance was infrastructural in nature. A lesson could be well planned but not effectively presented due to such limitations as a too large class, fixed desks that do not allow rearrangements, or even shortage of books and stationery (like graph paper). Other factors that shaped the observed lessons included teacher personality, teacher creativity, teaching methods, medium of instruction and classroom management.

TP assessment forms for the four student teachers revealed some areas for improvement regarding teaching performance of the LTP students; as shown in table 9-4. What could be revealed by the study was a thrust by supervisors demanding student teachers to use the discussion method, even when infrastructural limitations were reported. The second issue was the recommendation by the supervisors that student teachers should improve their English Language.

Table 9—4 Areas for improvement in teaching

Area of improvement	Number of comments	Example of the comments made
Preparation before lesson	1	"Improve by having preparation of what you want to teach. It is advisable that one has to get prepared before one gets into a class to teach. Otherwise much time is wasted; and strict headmasters often refuse Teaching Practice to be conducted in their schools, mostly for this reason. The presentation of mediocre type. Try harder".
Introducing a lesson	1	"When you enter the class try to clarify to your listeners, the pupils, what has been done before to the subject and what objectives of the new lesson are".
Group discussions	7	"Whenever you assign a group task make sure that your elicitation procedure is centred on the group answers. If you don't request for feedback from the groups, next time you assign the students such a task they will not work on it because they know they are not required to report. The aim of group work is to enable every student to participate in the discussion of whatever is being discussed. Later on every student should be in a position to contribute in reporting to the whole class".
Clarity and measurability of objectives	3	"You need to improve the way you state your specific objectives so that they can be measured. Just think how difficult it is to measure such objectives as, "Students should be able to know how--- or "Students should be able to know-----". You could use such words as 'define', 'mention', 'draw', 'name', 'record' etc."
Command of English Language	5	"Improve your spoken English. Avoid speaking words and sentences which are partly English and partly Swahili".
Plan of activities	1	"Students should take the central role in the teaching-learning process. Hence, they have to be assigned some more active roles than 'listening', 'watching', 'taking definitions', 'taking points'. You could give them chance to 'discuss in pairs', or 'discuss in groups' instead".
Mastery of the subject	1	"Relating living things and non-living things and hence grouping animals and plants! Why? The articulation of subject matter was essential in order to make the lesson more effective".
Class management	1	"Students should switch-off their phones"
Total	**20**[1]	

Student teachers involved in the case studies were asked to comment on their performance on Teaching Practice and on whether the TP had effect on their day-to-day classroom teaching. The following are some of the reflections made by the student teachers:

[1] *Some assessment forms had different comments hence the total of comments is higher than the number of forms.*

Table 9—5 Student views on the supervised teaching practice

Student teacher	Observations on the supervised teaching practice
Frank (Maendeleo Secondary School)	We can't satisfy TP assessors because their job is to look for the mistakes that we make in our classroom teaching. They always find something to talk about. Imagine I was told off for not having addressed my students by names.
Donald (Madukani High School)	The results are not very bad. I don't think it's fair though for the assessors to visit urban schools only. The TP experience for me was a real burden. I had to chase around for the assessor in two different schools to be able to get the four assessments.
Anna (Mnadani Secondary School)	Assessors visit during TP for the sake of making assessments not helping the student teachers learn. I was shouted at and given some nasty comments.
John (Barazani Secondary School)	The whole idea of TP is unbearably costly. You are constantly struggling to get assessed by the only assessor in town; as well as surviving in town. I only managed to get three assessments out of the required four.

A general view of student teachers' comments on TP was that they were dissatisfied with the TP process and outcomes. The comments pointed to areas for improvement such as a developmental approach to supporting classroom teaching, organising TP in consideration of cost and unnecessary relocations, and reducing emphasis of TP as a tool for assessment and organising it in a more collegial way in which the supervisor and student teacher would work together from planning to evaluation of the lessons.

9.7 *Conclusion*

Chapter Nine has put together issues discovered across cases that were reported in Chapter Eight. It has been reported in this chapter that school initiatives could together form a new understanding regarding student support in schools. The support, grouped in contextual and moral, professional development, and support for DL; appeared to confirm statistical evidence that school factors could be the most responsible factors for learning to teach and for student retention.

There are examples which could be taken up by other schools. The idea of recognition of the untrained teachers by for instance avoiding unnecessary labelling appears to have a positive impact in the case schools. Other schools could make this practice part of school culture. The practice does not have to add cost on the side of the school. It creates harmony and collegiality which are necessary in executing the school mission. Similarly practices on teacher professional development need not to put extra costs

on the school. Ideas such as the innovative *'changamoto ya leo'* at Mnadani, departmental meetings at Madukani, and chance peer discussions at Barazani are simply built on the principle of teacher collegiality. Other schools could develop the culture of sharing ideas on a more formalised way and on regular basis. Other schools could also practise a more supportive role by encouraging initiatives like the OUT book shelves at Maendeleo, and peer tutoring at Madukani and Maendeleo. The guiding idea should be on the direct role of teacher upgrading on teacher performance.

The next chapter will present a further analysis of data that were collected through SMS and emails.

Chapter Ten: Analysis and Presentation of Data from SMS and Emails

I simply use my mobile phone to access the internet

(Email from an LTP student teacher, 15/3/2008)

10.1 *Overview of the chapter*

The key objective of the SMS and emails in this study was to collect information on student persistence on the Licensed Teachers' Programme. Communication through short messaging service (SMS) and emails was conceived to be an effective way of following LTP students' progress over the first year of their study. However the manner in which responses were collected through this method pointed to another avenue through which ICT-based support for distance learners in developing countries could be developed. Information gathering through this method established that the student teachers had a limited access to electronic support both for academic and social purposes; but mobile phones could be used to bridge the gap created by the limited access to computer-based e-learning and e-support.

In February 2008 an e-mail was sent to all 39 respondents who had provided e-mail addresses. The message asked the respondents to provide some information on whether or not they were still in LTP. Those who were still in the programme were asked to provide further information on whether they had done all assignments, tests and examinations for the first year and how they had performed. Those who were no longer in the programme were asked to provide information as to what they were doing and any reasons why they had dropped out. The response rate of the email was discouragingly low such that SMS was adopted for the same purpose.

All 208 respondents who had provided their mobile phone numbers were sent a text message in February 2008 asking them to state whether they were still on the programme. Out of the 59 respondents of SMS, 53 confirmed that they were still on the programme. However, six of the respondents reported that they had dropped out, for various reasons. All students persisting on the programme reported that they had not received results for a majority of their first year assignments, tests and examinations, despite the fact that they were already in the second year. Although SMS had a better return rate, the brevity of the responses made it necessary to seek more information. As a result some phone calls and additional email exchange with the SMS respondents were opted for. This section will present cases of i) student teachers who were retained in the programme by using data collected through emails since information generated through emails were generally presented in more detail compared to SMS feedback. All six cases of email respondents who persisted in the programme

are included, and will be referred to as persisters; ii) former student teachers by using data obtained from SMS, telephone, and email. The dropout category consists of four cases.

10.2 *Communication with persisters*

10.2.1 Persister 1: Kassim

It all began with email exchange. Kassim was very good at responding to my mails. In a period of less than two weeks of email exchange he had responded six times. I would send an e-mail message to all respondents with e-mail addresses expecting that responses from many of them would take very long, because, as they said via the telephone calls, most of them accessed internet services only when they were visiting urban areas. However, I would be sure to receive Kassim's response, almost instantly.

The first email from Kassim was a response to the general email sent to all email users in the programme which was sent on Monday, 4/2/2008 at 04.08 GMT. His response was received on Tuesday, 5/2/2008 at 4.32 am. He wrote:

> *Thank you for your message. I wish to respond as follows: 1) I am still in the programme 2) I have had all assignments, tests and exams done. I am doing a B.SC.(Ed.) physics and maths, and education. I have received some results for education but none for both physics and maths. I can't understand why (**Translated from Kiswahili**).*

On Friday, 14/3/2008 at 6.27 am I sent him another email in which I expressed my delight for his progress, particularly for having completed all assignments, tests and exams for the first year. I also requested clarifications on specifics of his school. I particularly asked him to describe school support in terms of support from the management, peers and private tutors; as well as whether the school was in urban or rural area. His response was received on the same day, Friday, 14/3/2008 at 11.35 pm in which he responded

> *I managed to complete assignments, tests and exams because 1) I had received all study materials, 2) I had time and enthusiasm to complete all that was required 3) sometimes I had fellow OUT students from nearby schools discussing with me 4) I have a very supportive head of school "hana usumbufu" (he is not too demanding) 5) my school is in a remote rural area 6) in this school I have some other distance learners but I have little support from them because none of them studies science 7) as for private tuition, I have no idea as where and how to get private tutors in this part of the country **(Translated from Kiswahili).***

I emailed him instantly expressing my amazement as to how he could be so fast in emailing when he was in a remote rural area. I assumed his office or home had internet connection judging from his immediate emailing, and went on to ask him to describe internet connectivity in the village. I also asked him to elaborate on how he benefited from internet as a student in distance learning. His email came in on Saturday, 15/3/2008 at 12.35 pm. It read:

*Thanks very much for your email that contained some wise words. I am communicating from a rural village. I do not have a computer. I simply use my mobile phone to access the internet, and it enables me to read online materials. Because I cannot download the materials I read them directly from the phone (**Translated from Kiswahili**).*

Kassim's data from the student survey reveal that he was 26 years old when he was employed as a licensed teacher. He indicated that he had started direct from high school. Studying Mathematics and Physics, Kassim was registered into the Faculty of Science, Technology and Environmental Studies at OUT under LTP. His school was not a high school. There were no graduate teachers in the school. There was no school library. There was no internet connectivity in the school area. The only available supportive structures in the school were other OUT students and a reliable telephone network. He had not received support from any school supporters listed i.e., fellow student, colleague in the department, senior teacher in the department, cooperating tutor, seminars, private tutorials or OUT tutor. However he indicated that he found studying at a distance *less hard than he had expected* and teaching *as enjoyable as expected*. Although he never observed a senior teacher in classroom, never discussed his lessons with a senior teacher in the department, and never discussed his OUT assignments with fellows in department; he often had a supportive school management, often providing him enough study time, and often attending OUT study group discussions within the school. In evaluation, both OUT and school support were ranked as adequately supportive. Two more emails were occasionally sent by Kassim within the week that followed.

10.2.2 Persister 2: Jumaa

Jumaa's email was received on Monday, 17 March, 2008. He reported that he was still in the programme but that he had difficulties in getting funding for his studies. It appeared that he was overlooked in payments in which case he was not included into the initial LTP sponsorship by the Government. He had not received any other allowances contrary to promises made by the Government. Regarding progress in his studies he wrote:

*The problem is that I could not do all exams, assignments and TTs. This is due to lack of time for private study as we are being assigned too much work in our work stations. The main problem is on writing assignments for us who happen to be working in rural districts; we are forced to travel to regional centres based in towns in order to access library and internet café. It is very costly and we are not being assisted by our school heads. Everything is at your own cost. This is what limits the number of exams and assignments; to date I have a backlog of a lot of assignments **(Translated from Kiswahili).***

Jumaa believed that access to library and internet was highly associated with success in completing assignments. He pointed to the fact that distance learners in rural districts were at a disadvantage

because they had to arrange for frequent travels to urban areas to be able to read and write assignments. The problem becomes complex because they had to incur some money to be able to make the travels.

Survey data revealed that Jumaa is a formerly unemployed male respondent at the age group of 26-30. He was a student in the Faculty of Arts and Social Sciences studying Kiswahili and Literature in English. His school had a reliable telephone network but lacked internet connectivity and library. The only support he had was from a fellow OUT student and that from OUT tutors. He eventually indicated that DL was harder than expected. However, he reported to have found teaching more enjoyable than expected. He had reported learning materials at regional centre were not available; that there was no support on course selection; that face –to-face sessions needed improvement; and that there was a delay in communication between OUT and students. Generally, Jumaa reported that he was well supported by the school and adequately by OUT. Very often he had had a supportive school management, enough study time and he had opportunity to observe a senior teacher in classroom.

10.2.3 Persister 3: Emilio

Emilio's response was received on 17/2/2009 almost a year after the original message. His first email revealed that he was a persister in the programme. The respondent also indicated that he had problems with his email address and that he had finally sorted the problem out. It is interesting that he had remembered to respond to a one-year old SMS that requested the respondents to use email where possible! In a previous telephone communication with the researcher he had expressed concern regarding using emails as he said emails would take much longer to respond as he had access to the internet only when he attended face-to-to-face sessions.

> *I'm continuing with OUT studies. The studies have become so demanding but I cannot give up especially now that I'm in the third year. This is my email address (**Translated from Kiswahili).***

His second email which was received on Tuesday 14/4/2009 brought up another issue regarding accessing the internet. Responding to questions on whether he had access to internet and whether he still had fellow OUT students in his school the respondent revealed that although there was the internet service in his village he could only afford to send emails when he was attending some residential sessions. The respondent sent two occasional emails both of which were sent during residential sessions. It could be that the learner lacked time or money to pay for the service while at his village, in which case he never used the village internet at all; or that while he was visiting the village café the learner had some more important issues to deal with than responding to emails.

I received your email, I thank you very much. My fellow distance learners and I are still working at (name of school) and continuing with OUT studies. (The village) has internet services but when I sent you the last email I was in town doing exams; even now as I am writing to you, I'm in town again---. Have a good day ***(Translated from Kiswahili).***

Emilio's data retrieved from the survey revealed that the respondent was a male in the age group 20-25. He was enrolled in the Faculty of Science, Technology and Environmental studies studying the double mathematics subject combination. In his school he had at least one teacher with a degree in Education and that he had some fellow OUT students in school and in the maths department, from whom he usually received support. He also attended OUT study group discussions on regular basis. Emilio was employed as a licensed teacher immediately after his high school. In the questionnaire Emilio indicated that he would like greater support in accessing study materials

Our course is lacking materials. I'm asking OUT to print a lot of mathematics study materials so that to assignments in time and to have good preparation for the exams hence completing units

He had found studying by DL as hard as expected and the teaching job more enjoyable than expected. In his analysis of support, he perceived he was adequately supported by his school and well supported by OUT.

10.2.4 Persister 4: Zacky

A science student quoted below is also sending the email during residential sessions. He describes rural school environment as being a hindrance to DL. He wishes he had internet from which he could download various study materials. Lack of study materials and internet services plus a tight programme of study is what leads to the state of despair on the part of the learner. His only but detailed email was received on Tuesday, 5/8/2008

--- I hope you are doing well. I am alright and still doing my B.Sc. (Ed.). Brother, frankly things are not working out very well such that I am beginning to despair. I am in desperate need of study materials that can be of help for my studies on courses in Mathematics, geography, and Education. I am now in second year. I could not communicate with you earlier because the place where I teach is in remote rural; now we are having some practical training at the Open University headquarters. The study load has grown to be too much because we are being compelled to take more units so that we can complete our programme within the Ministry's deadline of three years. I am at a crossroads because availability of study materials is the main problem. ***(Translation from Kiswahili)***

Zacky was a male respondent aged 26-30.He was enrolled to study maths and geography in the Faculty of Science, Technology and Environmental Studies, but at school he taught maths. He joined LTP immediately after high school. He usually had support from a fellow OUT student, an OUT tutor and others like friends and from various libraries. Very often he attended OUT discussions within

school. Very often the school management was supportive. He also had opportunity to observe a senior teacher on regular basis. Support required was to have study materials brought in time. His evaluation of support was that he had a poor support from school and adequate from OUT.

10.2.5 Persister 5: Kalu

The notion that rural distance learners are deprived of access to internet is shared by the respondent quoted below. However instead of despairing as seen above, the respondent sounds very determined not to give in. Kalu's email was received on Friday, 2/5/2008 at 6.57 am.

> *I'm (Name). Thanks for the greetings. I would like to respond that I am still continuing with my studies although it is getting harder because at my workplace I am alone (No one for discussion with), and no access to internet. But for me ALUTACONTINUA (The struggle continues)'. Thank you very much (**translated from Kiswahili**).*

Kalu was a male respondent employed for teaching immediately after high school. He was at the age group of 20-25. In LTP he was in the Faculty of Science, Technology and Environmental Studies and his teaching subject was Biology. His school had had no supportive structures, except availability of other OUT students. He reported to have found DL harder than expected, but teaching as enjoyable as expected. He saw school support as poor and OUT's adequate.

10.2.6 Persister 6: Matu

The following quote is from an email received from Matu on Thursday, 11/6/2009. The student teacher puts need for internet at its highest level. He is of the opinion that although the programme of study is very demanding, availability of internet could ease many of the problems being experienced. Interestingly, it took this respondent more than one year to respond to the researcher's email circulated in February 2008. Could it be lack of access to internet or mindset shift to integration of computer technology in a modern society? If the learner had been attending the face-to-face sessions, visiting the regional centre or travelling to urban areas – which appears to be the case - he should have used the internet services there if he really wished to. This observation brings another way of thinking about adoption of modern technologies in developing countries – the need to emphasize integration of modern technology in day-to-day life of learners, particularly school teachers.

> *I am alright and continuing with my OUT studies although the study programme has become very tight; exacerbated by the rural environment I am working in, and that internet accessibility is a real problem **(Translated from Kiswahili).***

Matu was a male respondent aged 20-25, who was enrolled in the Faculty of Arts and Social Sciences to study geography and history. He joined LTP immediately after high school. He had other OUT

students in his school and in his department from whom he had support on regular basis. He required more support particularly on timely delivery of study materials and assignments, improvement of face-to-face sessions and more financial support. He had experienced that DL was as hard as expected and the teaching job as enjoyable as expected. His school support was rated poor while that from OUT adequate.

10.3 *Communication with dropouts*

10.3.1 Dropout 1: Davis

In the beginning of the second year while responding to my SMS on student progress, Davis had a telephone conversation with the researcher and explained that he was no longer an OUT student. He reported that he was delighted to have been provided with a place at a conventional university college to study a degree programme in Education (the very same programme he was undergoing at OUT) because the workplace was too remote to study by DL. He had initially indicated a need to be transferred from the school but there was no possibility for such a transfer. He said the major problem was transport. If he needed to catch a bus to town he had to wake up as early as four in the morning and walk for about two hours to be able to catch the only bus at 6. Because of transport problems he would require to have at least two nights in town if he was to visit the regional centre and the library. *'I was prematurely ageing myself unnecessarily'* he reflected on his teaching days.

Survey data show that Davis is a male respondent aged 20-25 enrolled in the Faculty of Arts and Social Sciences to study a B.A (Education) degree, with history and English as teaching subjects. It is further indicated that he was employed directly after completing high school. High school examination results showed that his performance was at the rank of Division II (11 points) with a principal pass C for history and English and an E for geography.

The student was posted to a remote school. He was clearly unhappy with the living, working, and studying conditions at the school. The questionnaire responses revealed that the school was for O-level secondary education. It had at least one graduate teacher in the school, and at least one other OUT student. However in terms of support he indicated that the only support he had was from OUT tutors during face to face meetings. Asked to indicate any particular support that he required to be able to complete his studies in three years, he wrote:

> *Transfer to another school. Because of remoteness of the area it has been impossible to get (study) materials and access to the internet*

Although the respondent showed that school management was very often supportive to his OUT study, all other school support elements were indicated as *never* supportive. He had eventually rated school support as being *poor*.

10.3.2 Dropout 2: Neema

Telephone conversation followed her beep. Asked why she decided to leave the teaching job she responded that she was more concerned with completing her degree course first before practicing teaching. She said she was very uncertain that studying Science through DL would earn her the degree, given the reality of the teaching and support system she had experienced in the first year. She reported that her school although a high school did not have a good laboratory in which she could practice science experiments. She added that even OUT did not have science labs such that science students had to be sent to some other universities to perform the practical sessions. She said she was not sure she was ever going to graduate through DL. Probing further, it was revealed that Neema had joined a conventional university to study Biology and Education, the same degree programme she had taken at the OUT.

> *Last year, we went to (a conventional university) to do the science projects. It turned out that we went too many. The lab staff were very slow. We only managed to do a handful of the experiments* ***(Telephone conversation).***

Survey data reveal that Neema was employed as a licensed teacher immediately after completion of high school and she was in the age group of 20-25. She was posted to a high school in a rural district. Being a high school the school had teachers with degrees in education; there was a well stocked school library and reliable telephone network as well as internet services. On the other hand, practices show that the student teacher did not have support from any school-based support elements listed. There was no school organised training for teachers or even private tutorials within the school. The school management was *never* supportive to her OUT study. The school *never* provided enough time for OUT study. She *never* had opportunity to observe a senior teacher in a classroom. She *never* had opportunity to discuss her lessons with a senior teacher in the department. She *never* discussed her assignments with any fellow teacher in the department; and *never* attended any study group discussion within the school.

Eventually she indicated that although she had found teaching *more enjoyable than expected* she had on the contrary found studying at a distance *harder than expected*. If any support were to be provided to her then that should be more regular residential courses particularly to science students like her. In

addition she would prefer having the Government providing funds for books especially for rural students. Generally she rated school support as *poor* while that of OUT as *adequate*.

10.3.3 Dropout 3: Mawa

Initially the respondent had indicated that he had been 'well supported' by both OUT and the school and hence he was included in the case study phase of this research. However he dropped out of the programme immediately after Year one. As a case study student, Mawa's report has more background on the student and the school context than other dropouts reported in this section. At the beginning of the second year of study I telephoned all students who were in the second phase of my study in order to find out if they had been successful in registering for the second year and to find out their respective results for the previous year. Mawa's response was that he was no longer a student of OUT. He said he had decided to join a conventional university. It was later discovered that he had joined a degree programme in Law.

Data from the survey reveal that Mawa who was at the age range of 26-30, was studying in the arts and social sciences, doing a BA (Education) programme with English Language and Kiswahili as teaching subjects. Previously he had worked as a teacher in a private school. The school had at least a teacher with a degree in education. It had reliable telephone network and access to internet. There was support from a variety of sources at school area level: fellow OUT students, from a senior teacher in department, from a cooperating tutor, from OUT tutor and from nearby teachers who are OUT students.

The school had about 500 students in Form one to three. It had 13 teachers, including three temporary primary school teachers seconded from the local government. A library was not available in the school but there were 13 more secondary schools in the town making it convenient for sharing materials and conducting discussions among teachers within the area. In addition, there was a district library in a nearby town. However Mawa observed that the library lacked the basic reading materials relevant for his courses. He had to travel to the regional library 80 km away.

He found himself being posted to the community school in his own area. The school environment was not new to him. He was born, grew up and went to school in the same area. However the teaching job was new. He had spent only a few months at the private school and he had attended the four weeks training. Asked if working in his home area was something important to his job and his studies, Mawa had this to say:

> *This is my home place. I was born here. Sometimes I think it isn't a good idea to be working near home, especially when you are trying to establish yourself as independent individual, free from your parents and relatives. They think you are working and have money. The fact of the matter is I am a student. I need money and time to spend on my university studies* ***(Interview with the respondent; a translation from Kiswahili).***

Regarding OUT studies, he had registered for 13 units in his first year. He had done all the assignments and tests for the first part of the year. He had attended the first face-to-face meeting where they were introduced to many issues – writing assignments, communication procedures, forming study groups. They were also taught some specific topics as appear in the study materials. He says he had enjoyed the meeting which was funded by the Government.

He believed arrangement for the examinations was disastrous and particularly staying in town for the whole period of examinations at one's own cost was really unbearable. He said he was forced to ask his school head for financial assistance, who agreed to pay him as a loan. He said it was important for him to stay at the regional centre so as to meet and discuss with OUT students and prepare for the examinations. He recommended that OUT should reschedule examinations and in the case of the LTP the best idea was to schedule the examinations during the Government funded face to face meetings. By the time of the interviews, Mawa had received results for all assignments and some tests. The results were "*very good".*

Going through his diary, for a typical working day Mawa usually woke up at six, did some housekeeping activities before walking to his work place at seven. It took him half an hour to get to the school. The school timetable went up to 3.30. When he finally arrived home he left himself about three hours of rest and domestic duties before embarking on self study or joining a discussion group. By 10 he would normally go to bed. In summary, the student used his time as follows: eight hours for the job; four for study; four for private domestic activities; and eight for sleeping. In practice however, time spent for the teaching job and time spent on study is not clearly separated. Most study for lesson preparation and the teaching itself could be directly or indirectly related to study for academic purposes.

10.3.4 Dropout 4: Teo

Teo was the only dropout who agreed to communicate through emails. His first email was received on Friday, 30 May 2008 09:10 (GMT). He responded to my appeal sent by SMS to all mobile phone users for them to respond by email if they had access to the internet. He declared that he was no longer a student of OUT, and that he had joined another university. He attributed his dropout to *kauli mbaya* (abusive language) by the acting head of school and his assistant head. He described the situation in

the school as discriminatory. He had the opinion that untrained teachers like him were not required in the school. He said when he first arrived he was told to look for accommodation elsewhere because the school had no room available for him. It was luck that one teacher was willing to provide him shelter for the night; otherwise he would have ended up roaming around the village looking for accommodation. He also pointed out that sometime during his early days in the school he had asked for financial assistance from the (acting) school head but he was told that the school had no money for teachers, and that if he thought he was being treated unfairly he was free to leave because, as the (acting) school head put it, *'my school can do without you*'. He observed further that while he worked hard teaching in his allocated subjects, when it came to attending seminars it was the senior teacher in the department who was selected to attend. He finally dropped out of the programme and joined a conventional university to study economics. He was not going be a teacher any more.

By following Teo it was possible to probe how dropouts distinguished DL from conventional learning. Teo having been re-enrolled in a conventional university had observed that

> *(At the conventional university) Results for the first semester are very impressive. In one course I got a C which was not very good. University study is easier than that of OUT - great library and brilliant (internet) network, accessible at any time. The only problem here is that I have to pay some tuition fees about TZS 300,000 which I usually pay from my accommodation and meal money that I receive from the student loan board* ***(Email received on Tue, 3 Jun 2008 11:00:53 (GMT); translated from Kiswahili).***

Teo was employed as a licensed teacher immediately after completing high school. He was then at the age of 23. He had been enrolled with OUT to study economics and geography. He described his school as being a high school; with teachers with a degree in education. The department had teachers with a degree in education as well. The telephone network worked perfectly in the school area. However, the school and department lacked graduate teachers of OUT. There were no other OUT students in the school and the school library was not useful for his OUT programme. In terms of school practices, he had indicated that there was no support from all sources of school support listed except a colleague in the department. He asserted that he had found studying at a distance as hard as expected and the teaching job as enjoyable as expected. He required support in having regular tutorials in his courses in economics.

In terms of frequency of support he indicated that school management was never supportive, the school never provided enough time for OUT study. He never observed a senior teacher in a classroom. He never had opportunity to discuss his OUT assignments with fellows in the department and he never attended any OUT study group discussions within the school. However, he usually discussed his

lessons with a senior teacher in the department. Eventually, he evaluated school support as *poor* while that of OUT as *adequate*.

10.4 *Persistence behaviour of the respondents*

At a surface level respondents who had decided not to persist in the programme seem to have made the decision right from the beginning of their teaching job. They appear to have used teaching as a 'gap year' job as they were waiting for enrolment at their universities of choice. This line of reasoning could be substantiated by the fact that all the respondents who declared to have dropped out of LTP had actually dropped out during the new academic year in or immediately after October 2007, the beginning of academic year for most other universities in Tanzania, except OUT. (OUT adopted the October calendar as from the October 2007 such that in 2007 admission was done twice). Enrolment in higher education institutions could thus be the single major pull factor. However some other push factors appear to emerge from the study.

The reasons attributed to dropout include *stigma on the untrained teachers*. Teo, who decided to join a conventional university to study a degree programme in economics, reported to have been stigmatized by the high school community he had been posted to. Another reason is *remoteness of the workplace*, which is well presented in the case of Davis. Davis reported that he was delighted to have been provided with a place at a conventional university college to study a degree programme in Education (the very same programme he was undergoing at OUT) because the workplace was too remote to undergo DL studies. The case of Neema reveals another reason for dropping out - *difficult in studying science subjects through DL*. Neema reported that science subjects require regular lab experiments. She experienced that her school although a high school did not have a good laboratory for which she could practice the experiments.

Although most of email and SMS respondents were still in the programme, some of them were unsure whether to stay or to drop out. Reading through the SMS and email messages, some respondents were still thinking of moving to conventional universities as late as the end of their second year of study. One respondent said he was looking forward to joining a conventional university as late as November 2008.

> *My friend, I think I need to apply for a campus-based programme. I'm having all sorts of problems studying through distance learning. As for first year studies I did complete all assignments, tests and examinations. I haven't decided yet, though. I may as well stay if things improve.*

Another respondent was in the same situation, to stay or not to stay.

A B.Sc. (Ed.) programme is no game. The programme is becoming more and more difficult to the extent of despair. I'm now in the second year. I'm not sure whether I will make it.

Yet there are those struggling students. This is a group of respondents who would like to continue with studies as smoothly as usual but they find themselves in circumstances that dictate otherwise. One respondent sent this SMS:

I had some family problems that prevented me from doing TP. Otherwise, I'm OK.

Another respondent reported that he had only done some of the tests and examinations because he had lacked time to prepare for all the tests and examinations.

I have too many responsibilities at my workplace. In order to write assignments I have to travel to the regional centre for library services and for the internet. I have to incur all the travel expenses. As a result I could not travel as frequently as required, and I could afford to do only a few.

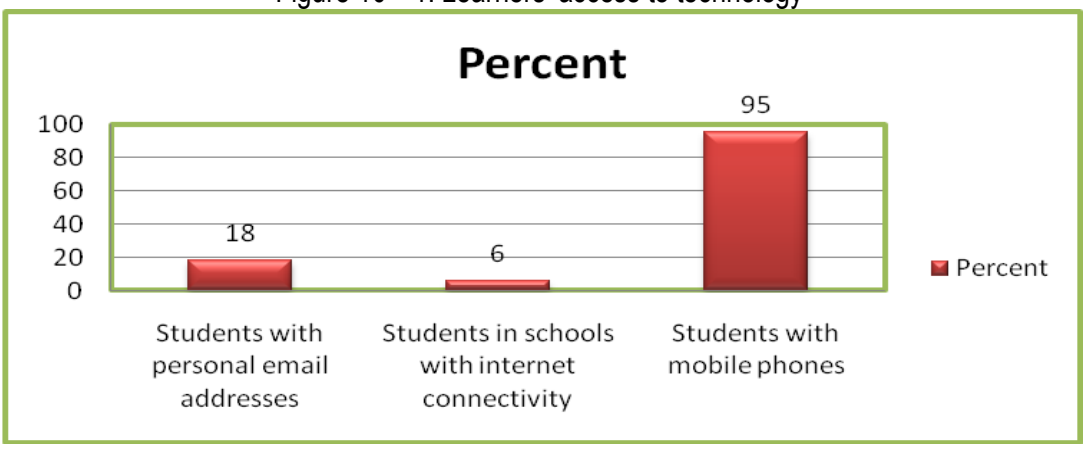
This response is closely similar to Jumaa's email (10.2.2 above) and Zacky's (10.2.4) on the aspect of the student teachers being caught up between work and study orchestrated by the cost aspect of frequent travel to regional centres and libraries. A phone conversation with another respondent revealed that although he was still teaching he had actually stopped studying. He said he had stopped OUT studies and had not done many assignments, tests and all examinations for the first academic year. Asked to explain he said he could not receive study materials; that he was alone in a geographically isolated school; that his only fellow OUT student in the school had already left and joined a conventional college. He looked forward to resuming studies.

There were many persisters. This is a group that comprises a majority of the SMS and e-mail respondents. They are the respondents who had decided to stay regardless of the situation in schools or the programme in general. They do not necessarily have the best school support or any other support for that matter, but rather a more understanding and more coping attitude. Emilio assured himself that he was not going to give in however hard the studies become. Kalu's "alutacontinua" response showed how working and studying had become a matter of constant struggle, but yet still how the respondent refused to give in. While Kalu's 'alutacontinua' did not explain what mechanisms he was using to cope with the rather difficult environment, Kassim on the other hand went the mile to explain one innovation that could significant transform DL for rural students, the use of mobile phones for communication, emailing, and accessing online study materials.

10.5 *Access to and use of ICTs*

Whether university investment on technology is effective in playing a supportive role to distance learners depends on learners' access and use of the technology in question. While much focus by OUT was on computer-mediated technology, access to such technology among learners was barely minimal and intermittent. Figure 10.1 shows access to technology in which learners' access to computer based internet is as little as 6% at a school community. The technology that was abundantly available was the mobile phone. Mobile phones were not only accessible to an overwhelming majority of almost 95% of the respondents but also proved to be one of the possible ways through which learners could access the internet.

Figure 10—1: Learners' access to technology

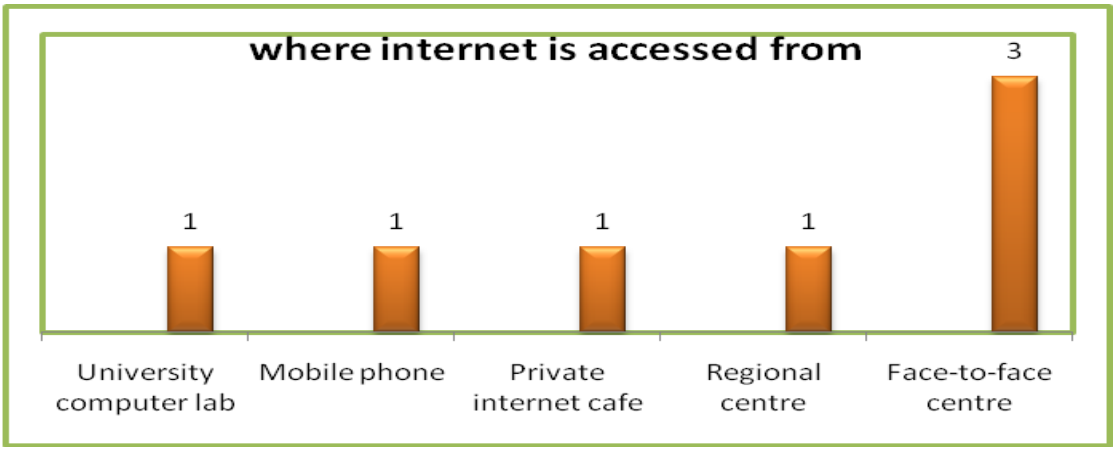


Through the seven respondents who responded to this research via emails, five different venues of accessing the internet were identified. Three of the respondents could only respond to emails sent to them at a residential training session including face-to-face and practical training sessions. It appeared that their school communities did not have access to internet services and they could not even access the service at the regional centre. However one respondent among the three reported that the village in which he was working had an internet cafe but for some reasons he responded to emails only when he was attending face-to-face sessions.

The regional centres, which are the official support centres of OUT students, did not necessarily attract learners to use internet services. Results from this study regarding the use of internet services revealed that students could not easily use the facility because of distance and sometimes the regional centre did not have an internet facility for learners. Only one of the email respondents used the regional centre internet facility to respond to the researcher's email.

The use of private internet cafés was another possible access to internet among the respondents. These services were usually available in urban areas and the learners in the rural areas were required to travel distances to be able to access them. However, there was likely to be a private cafe at a district level whereas the regional centre was located at the headquarters of the region. In terms of cost, it would appear that for rural learners private internet cafés were less costly than travelling to the regional centre, unless the student had some other administrative duties to attend to at the regional centre. One respondent, a dropout who was studying at a conventional university, responded through computers at the university; and one responded with emails through his mobile phone.

Figure 10—2 Where do you access the internet?



The means by which internet was accessed determined frequency at which the respondent communicated. Sending emails from face-to-face sessions, regional centres and private cafes all had a frequency of two. Using computer laboratories had a frequency of four while use of mobile emailing produced six responses. It is important to point out that sending emails via a mobile phone was the single route that produced immediate responses from the sender.

Figure 10—3 How frequent did the internet users communicate by email?

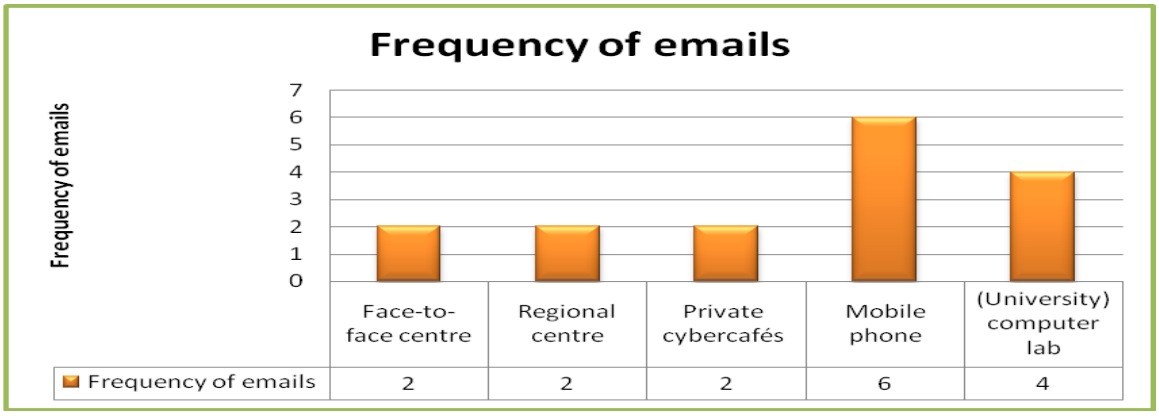


Table 10—1 How often does an internet user access the internet?

Where the internet is accessed from	Access frequency
Face-to-face sessions	Only when the students are attending a face-to-face session. The sessions are usually organised during the long holidays in June and December. Some students attend practical training sessions as well, usually in July
Regional centres	"I can afford travelling to the regional centre at least once a month". (Respondent)
Private internet cafe	"I try going there once a week. It is very costly though" (Respondent)
Mobile phone	"When I need to access the internet I make a sufficient top up" (Respondent)
University computer lab.	"I visit the internet almost every day" (Respondent)

10.6 *How does internet support distance learning?*

All email respondents expressed their strong belief in the internet as an important tool for their learning. Those without access to the internet in their schools seem to associate difficulties in their studies with lack of access to internet. The issue is, what exactly do they need the internet for?

10.6.1 Accessing the university website

The OUT website appeared to have almost everything the DL student could need. It contained information, but most relevant to current students were the features summarized in table 10:2 below. In emails above the respondents revealed accessing the internet and being able to access online materials. It is important to point out that the OUT website had a facility in which students could access free online materials. Those who had access to the internet therefore had the advantage of reading and downloading such materials. The university website had a lot more information both administrative and academic.

10.6.2 Internet as a means for self-preparation for writing assignments

When distance learners receive assignment questions they strive to read and write the assignments within the deadlines. The problem is they require additional reference materials as the questions are usually not formulated directly from the course materials. This is one of the challenging issues in DL - how to provide learning experiences to learners such that the learners will be able to do assignments and tests using the course materials. Some theorists would require DL institutions to ensure that learners are provided with all the materials for them to do the assignments. The problem with that is the possibility of cultivating surface or rote learning. Using internet for accessing materials was regarded as

very necessary for students to be able to write their assignments and prepare for exams, as reported by persister Jumaa (10.2.2, above).

Table 10—2 OUT website feature for current students

ICT helpdesk	Students could send an e-mail to an ICT technician for ICT-related support
Announcements	Updated daily, a university 'notice board'. Students could access all current university announcements
Assignments	Presented under respective faculties, assignments for all courses could be accessed and downloaded by the students. The assignments would remain until a set deadline after which they may not be accessible
Examination regulations	Procedural issues regarding eligibility to examinations, registration, appeals and other related issues
Library resources	Students' access to e-books and e-journals
Students' information resources	Log on to SARIS, library management system, learning management system and free online journals
Course outlines	Students' access to course outlines for those courses that do not have specific study materials.
Acceptable ICT use policy and procedure	Rules guiding appropriate use of the university website.
Student mail	Facility for students' e-mailing

10.7 *Use of mobile phones*

Mobile technology has been revealed in this study as a potential route for student support in that it has minimal barriers compared to a computer. However, there are several issues of concern regarding rural distance learners.

10.7.1 Lack of electricity in rural areas and the need to recharge the phone battery

One of the key issues regarding ICT in rural communities is availability of electricity. A simple mobile phone in a rural African village may present a challenge on how to maintain it due to lack of electricity. When asked, the respondents of SMS named one consistent way used by rural owners of mobile phones living in places without electricity was the use of car batteries.

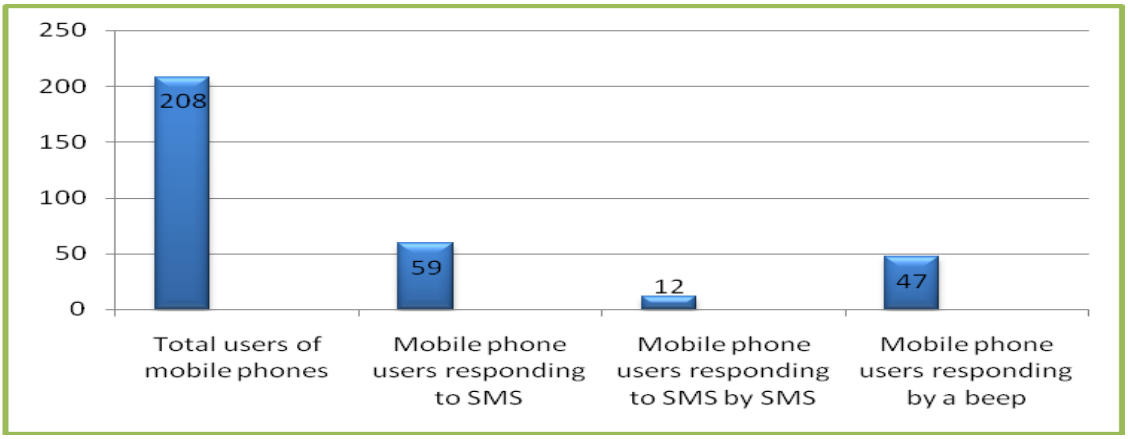
> *The electricity used to recharge the mobile phones is that made from car batteries or occasionally from generators. We ask the wenyeji (natives) to do it for us. Electricity made from car batteries is the same that has been used for years by people in rural areas for running cassette players in the village clubs, and recently for watching TV. You find a house that does not have the (national) grid electricity having a TV dish (antenna), inviting the neighbourhood to enjoy 'ze comedi' (a popular TV comedy session in Tanzania).*

The response above points to two issues regarding rural socio-technological realities: 1) the aspect of improvising, the use of car batteries to generate electricity. The batteries are then taken once in a while to be recharged in a nearby town centre that has electricity; and 2) technology sharing.

10.7.2 Unintended responses: The 'beeping' tradition among mobile phone users

One of the findings in this study is rampancy of a rather unusual way of using mobile phones among the respondents of this study. While 59 respondents did respond to the SMS, it was only 20% of them who actually responded by sending a reply by SMS. The remaining 80% made a beep (an intentional missed call). This rather frustrating experience for the researcher who was trying to collect information regarding progress of the programme and students led to the researcher's decision to probe deeper about this practice.

Figure 10—4 Mobile phone users' behaviour on use of SMS



In a further series of calls, the respondents were asked, among other issues, to provide their opinion as to why mobile users preferred beeping to sending SMS. Various answers were collected to the question. However what seemed evident was the fact that beeping was a cultivated tradition inherent among mobile phone users. A summary of reasons for having to beep is provided in Table 10-3.

Table 10—3 Why do mobile phone users prefer beeping?

People who beep you assume that you know them and that their names appear when a beep is made. The meaning of a beep will depend on some previous arrangements.
Beeping is a complete communication by itself. It is some sort of sign language. But meaning will depend on the context of the beep.
People make a beep in order to evoke a call. Some, like relatives usually leave a beep because they have no enough top up or they have developed a habit such that they think the one they believe has money will respond by a call.
You make a beep when you do not want to disturb the person on the other end, in case they are busy at that particular time. They can beep back to imply they are ready for a call or they can call back straight away. You wouldn't be happy to get a call at the middle of a lesson. A bit of beep will make no harm.
Have you heard the song that says "Nibeep nikupigie, kwani unacho kile nikitakacho" [make a beep and I will call you because you have what I need]? The person in need will have to incur the cost.
When I receive a text message that does not require a reply, I simply make a beep to confirm that I have received the message.

(Translation from Kiswahili)

The beeping tradition as discovered in this study provides information regarding traditions among users that are not necessarily intended by the designers of the technology. It is part of the socio-technological issues that need to be analysed before adopting a technology. At a practical level, preference for beeping points to the users' need to have support tools that do not require their having to respond by sending back some SMS and certainly not having to make a call, particularly if cost is on their side. This finding also points to the need to design tools that will only require learners to receive an SMS and make a call to listen to a prerecorded academic-related support lecture or instruction. In the same tradition of beeping the learners' support tool could be designed in which SMS could be circulated to alert learners of availability of tutors or faculty workers to respond to their questions; in which case the learners could only make a beep for the faculty to call back.

10.7.3 Limited capacity of mobile phones

Mobile phones are limited in screen sizes and font. They are also limited in terms of the number of characters per SMS. It is used for personal short messages with the size of the text not exceeding 160 characters per message and as such could be difficult getting some academic support tools developed within this character limit. The character limit in a single SMS might have affected the first SMS sent to respondents in this study. It appears that the SMS was too long for some respondents' phones to appear as single message. As such, the affected respondents could not get the last bit of information

which had the researcher's name and address. I realised that after receiving some SMS demanding to know who the sender was or saying they had received some incomplete messages.

The respondents' ability to manoeuvre these shortcomings of mobile phones is important, particularly as SMS-based support tools could be developed for adult learners. Features of respondents' SMS included brevity of the messages, use of contractions and short hand techniques. The trend of thumb-typing text messages onto a tiny screen has given rise to a whole new system of abbreviations and altered grammar. The following are text messages taken from student respondents who were responding to the researcher's SMS that asked them to state their progress in OUT studies.

Table 10—4: Text short forms

Type of short forms	Examples of SMS used short forms
Use of numbers for words	*H2U, everything is OK. (Student # 31)*
Use of letters for words	*It's fine as well as OUT studies. Thanks for remembering me Mr. Ng'umbi. God be with U. (student # 83)*
Word abbreviations	*Ooh thanx a lot. I'm fine & my OUT studies are OK. I'm proceeding well. (Respondent # 150)*
Word contractions	*All the best on u'r doings. (Student # 120)*
Symbols	*Marking @ F2F centre has made it possible to get results in time. (Student #23)*
Avoiding elaborations	*OK thanks. I'm doing so-so. (Student #17)* *Thanks. It's OK. (Student # 152)*

10.8 *How do students use mobile phones for studies?*

Respondents were further asked to explain how they used their mobile phones for academic purposes. Some of the responses were:

> *OUT encourage us to use the mobile phones to communicate with the regional director or even the headquarters but the issue is that when you need to know something, you do not get the help instead you end up getting promises.*
>
> *The (mobile) phone is used to arrange discussions among members of a study group.*
>
> *Sometimes an important message is circulated by members of a group who have been able to visit the university website.*
>
> *It is during examination period when the importance of having a mobile phone is realized. Messages keep on circulating containing some questions of 'leaked exams'. You are likely to receive the some text message from different people whom you normally share information with. When we get such questions we arrange some discussion sessions. Most of the time, however the questions that appear in the examination papers are not entirely the same. But because we take the circulated questions seriously, we end up getting something to write about.*

Use of mobile phones for accessing online information and study materials (the case of Kassim, 10.2.1, above)

The first response points to students' need for administrative and academic support. It also shows that administrative and academic support tools designed through SMS and mobile phones in general need to be conceived as a proactive initiative by the faculty and not merely a matter of reaction to what learners present as problems or queries to be resolved. The students' responses reflected that the faculties had been trying to encourage learners to use their phones to seek for help from the faculties and from among learners themselves but what is apparent however is that there were no institutional support programmes set for the purpose.

The second and third quotes point to the role of mobile phones in linking the distance learners who otherwise would be very isolated. This role as revealed in this study, leads to another way of thinking regarding group formation among distance learners. While groups in a traditional way reflect the physical interaction among learners who happen to be in one place, this new understanding of student grouping as enhanced by their network of mobile phone communication allows distance learners in developing countries to form "virtual communities of learners".

SMS ability to circulate among learners within a short period of time and its influence on evoking group discussions as quoted above, provides DL planning with another opportunity to think of incorporating instructional support tools that may be designed using SMS and that may be circulated to support learners to assist them in writing their assignments or prepare for tests and examinations. One issue is obvious about the power of SMS – its role in leakages of examinations, as reported in the fourth quote. It is obvious that if examination management systems are not properly controlled the examination papers can circulate using SMS in a very short period of time. The context in which the respondent provided this response however makes this finding very interesting. It is the ability of the SMS in building the 'virtual community' strongly held together by the need to work out the examination questions believed to be real.

10.9 *Conclusion*

The chapter has provided information on student progress over the first year of the study. Through SMS and emails it has been possible to follow students' life of both persisters and dropouts. It has been reported that there are distance learners who seem to enjoy the DL mode; those struggling to cope with

it, and those who have decided to drop out of the programme. The chapter has pointed to various reasons for those categories of distance learners, as reported through SMS and emails. Persisting student teachers appear to have adopted some personal coping mechanisms such as the use of technology and a persistence attitude. It has been reported that many respondents were either struggling with their study and work schedules or were unsure whether to continue with studies or dropout. Those who had already dropped out of the programme did join other universities. Other push factors were reported which included stigma on the untrained teacher, difficulties in studying science through DL and remoteness of workplace

This chapter has also provided data analyses on use of SMS and emails among LTP students. It has been presented that LTP students have limited access to computer technology and that being the case they tend to attribute many of the difficulties experienced in the DL study with such technological limitations. It has also been established that access and use of mobile phone among the students has made it possible to form mobile phone interactions among them. As a very innovative possibility, it has also been discovered that the student teachers are actually using mobile phones to access the internet and use the internet to access online study materials. The use of mobile phones for academic purposes, however, appears to lack institutional recognition and thus functioning as only an informal way of collaboration. Other challenges regarding mobile phones have been presented, particularly rampancy of the beeping tradition as opposed to sending SMS and making calls.

Chapter Eleven: Discussion of Findings

The real voyage of discovery consists not in seeking new landscapes but in having new eyes

Marcel Proust (1871-1922) French Novelist and Author

11.1 *Overview of the chapter*

Interpretation of data is the essence of research. It is at this stage that the results of the study are discussed and the researcher's own interpretation of the results put together in a consistent way and in the context of existing knowledge. Chapter 11 therefore presents discussion of the findings recorded in the previous chapters. The focus of the discussion will be on relating the findings to the original research problem and the specific research questions; relating the findings to pre-existing literature and research studies; determining whether the findings have practical significance, that is, whether the findings are usable; and determining the extent to which the findings contribute to the body of knowledge as far as support to DL student teachers is concerned.

This study was designed to explore the role of schools in supporting distance learners based in schools. Specifically the study sought to find answers to the following research questions:

1) What is the context in which the Licensed Teachers Programme was implemented?
2) How do student teachers learn at a distance?
    i) What are students' attitudes on distance learning?
    ii) What are students' perceived support needs?
    iii) What is the actual support provided to distance learners?
    iv) What is the role of ICTs in supporting distance learners
3) How do student teachers learn how to teach?
    i) What are students' attitudes on teaching?
    ii) What are support strategies for learning how to teach?
    iii) What is the observed performance of the student teachers?
4) What is the impact of support on student retention?

11.2 *What is the context in which the Licensed Teachers Programme was implemented?*

Literature on teacher learning at school level, (Abdallah, 2009, McClain and Cobb, 2004, Mouza, 2006), associates school context with the level of teacher professional development. Findings regarding LTP, point to the fact that school context was largely affected by the wider educational and OUT contexts such that the school was limited in terms of supporting teachers in a systematically formalised way. The

wider context of LTP comprised mainly of the MoEVT policy on teacher deployment and professional development; and OUT policy on teacher trainees' support.

As a result of rapid establishment of new community secondary schools (under SEDP) more and more new teachers were required in the new school. The study established that 95% of the respondents had been deployed at the new schools (registered as from 2005). This kind of schools seemed to have a lot more complications as far as teacher professional development is concerned. It was found that the majority of teachers in new community schools were untrained and inexperienced thus supporting literature (Perraton et al, 2002; Wedgwood, 2007) on presence of untrained teachers in schools. It was all left to heads of schools to devise ways of supporting teacher professional development. In the questionnaire it was reported that students were poorly supported to the extent that some needed to be transferred to other schools because they had considered their schools as being too isolated and as such they could not have access to frequent travel to study centres and to attend study group meetings. This aspect was further followed through SMS, from which it was learnt that the same schools were built too far from settlements making it hard for teachers and students to travel everyday to and from. All new case schools lacked staff houses.

LTP student teachers were "exposed to the rudiments of teaching" (Open University of Tanzania, 2007) in a college-based course that lasted for four weeks. News of this practice led to an eruption of anger among the public as the practice was interpreted as undermining quality of teaching. Among the major opponents of the policy on fast track teacher training, were the Tanzania Teachers' Union (TTU) who declared not to accept the untrained teachers as teachers. This seems to have had a deeper impact on LTP students who found themselves in high schools where the majority of teachers were relatively well trained. Evidence from case studies and SMS revealed that LTP students in such schools were marginalised, stigmatised and in some extremes told the schools did not need them.

It has been found that deployment was done in such a way that most new teachers were posted to new schools where they found themselves making the majority. Evidence from case studies revealed that in the new O-level schools all teachers (except the head of school) were actually new and untrained. The effect of this reality was that formalisation of mentorship and any senior/junior professional relationship was almost impossible. However, the fact that most LTP students found themselves among other untrained teachers made them feel more welcome compared to those who were posted to schools with better trained teachers.

The LTP students were sponsored by MoEVT for OUT studies for which they were assisted with tuition fees, stationary and book allowance and TP allowance. Evidence from the student questionnaire revealed that most respondents needed more support financially. The additional costs were those related to frequent travel to the regional centres for all sorts of administrative and bureaucratic meetings as well as private study at the regional library. Students in all case studies had the opinion that what they incurred in their studies actually exceeded what they were getting through both salary and OUT sponsorship. There are two reasons for that i) late payment of book and stationary allowances, and TP allowances. ii) Attendance at examination venues which were actually meant for the mainstream students in June 2007. Late payment of allowances was related to bureaucratic reasons related to transfer of the money from the sponsor to OUT and then to students. This process was defended on the basis that the Ministry could not pay the students directly because it was OUT actually who had the record of the students who were still persisting in the programme and it was the attendance at face to face meetings that determined payment.

The Government policy on teacher mentorship was elaborated in the guideline for trainers and mentors (United Republic of Tanzania, 2004a). It was stated that roving mentors would be deployed to assist the new untrained teachers probably as a result of consideration of the difficulties in having meaningful school based mentorship programmes. Mentor's guidelines were developed. However it was not made clear as to who the roving mentors would be. This plan was never implemented, "*due to financial reasons."* The alternative was for each school to have a school mentor. It was confirmed that schools had to select one experienced teacher to get on-the-job training as a mentor and work with the new teachers. It was apparent however that there was no ministerial support in training of the school mentors. Absence of a formal mentoring programme for the untrained and new school teachers by itself could signal likelihood for teacher attrition (De Jaeghere *et al*., 2006; Hastings, 2007; Ingersoll, 2004).

LTP was designed to run using the normal OUT student support structures with the only addition being extended face to face meetings. The support structures included a two day orientation, two extended face to face meetings of four weeks each, and regular support by regional centres. The school support element was not included in the LTP design and that could be interpreted as a lack of balance between system-wide support and situated support (Benis, 1999; Brady and Schuck, 2005; Hastings, 2007; Smithey and Evertson, 2003). For the other student teachers OUT had been using school heads in supporting student teachers based in schools. The heads were supposed to make assessment of the students in the second year and fill assessment forms that would be used to decide whether the

students were suitable for the teaching job. As for LTP the use of heads of school was reviewed and thus students were assumed competent for teaching, as they had already been employed and were already working as teachers.

In Chapter 2 it was reported that teacher education in Tanzania was implemented in two different systems. The Ministry of Education and Vocational Training (MoEVT) was running certificate and diploma courses in various teacher colleges for primary and lower secondary schools. On the other hand, universities, mainly the University of Dar es Salaam and the Open University of Tanzania had their degree programmes for senior secondary schools, teacher colleges and for education administrators. The two systems had parallel ways in terms of support to student teachers during teaching practice. In the MoEVT teacher colleges both the certificate (at least up to 2006) and diploma programmes had a one year school-based component. Theoretically the student teachers had to be supported by school mentors and school heads as well as college tutors. The university-based teacher programmes had a long tradition of short term TPs whereby groups of student teachers were sent to schools to practice teaching and get assessed by the university tutors.

Practical teaching for student teachers enrolled with universities was organised used supervised teaching practice. OUT teacher education system did not differ from that of the conventional university-based model despite its being a DL institution. Student teachers were supposed to be sent in groups to some selected schools to practice teaching and be assessed by the OUT tutors. Ironically however while the student teachers had been working as teachers in their workplaces, during TP they were to relocate from their workplaces to attend the TP stations. Clearly, the two student teacher support systems present a gap in that the school-based is theoretically rooted on the interactive theory and practice theory (Eraut, 1994, Kolb, 1984) while the TP model is based on the theory into practice theory.

Evidence from the study shows that LTP was implemented mainly using the theory into practice model. In this model student teachers were treated as non-practising students. The fact of the programme, however, is that LTP comprised school-based student teachers. The theory into practice model operates by separating theory (teaching subject and pedagogy) and practice (teaching practice). There was some evidence that this could be a result of dependence on conventional university thinkers deployed by OUT. In terms of student support, this approach means that students have to rely on university tutors. The student teachers are made to believe that the university tutors are the only

legitimate source of knowledge. Eventually, other sources of knowledge readily available in schools are not developed and not entertained as student academic support structures.

In Tanzania, it has been observed that major teacher education reforms have been conceived and implemented by politicians, not the academics. With reference to UPE teacher preparation and the school-based certificate and diploma programmes, it has been noted that the Government has been more accommodating to new ideas regarding teacher recruitment and teacher training than have been the universities. LTP students as part of the untrained teachers in schools appear to have found themselves caught up between two competing schools of thought, particularly as the programme was implemented in collaboration between OUT and MoEVT. The argument has been that untrained teachers affect the quality of secondary education. However at the time of massive development in school enrolments and under great teacher demand, research has been consistent that field-based teacher education is the only way out (Lynd, 2005; Moon, 2005; Perraton, 1986). Besides, it appears that there is confusion between deployment of untrained teachers in schools and having initial teacher trainees in schools. The latter is the case for LTP.

School in the context of LTP refers to workstations to which LTP students were posted. The role of these schools however was not made clear. At some initial stages school heads were reported to have denied LTP students permission to attend face to face sessions because they were not aware of how LTP study was being operated. It appeared further from students' SMS communications that misunderstanding regarding school management refusing to support LTP students was among the push factors for many who decided to drop out of the programme. LTP designers seem to have taken for granted support from the school management and school teachers, by not involving them in the planning of the programme.

School in the context of mainstream student teacher support at OUT refers to TP schools. It is the argument of this thesis that school-based support could be more appropriate than the TP model. Understandably, however, the nature of most schools in the rural areas presented difficulties in implementing school-based support. LTP seems to have adopted the normal OUT's TP design in which some urban schools were identified for student teachers to conduct their teaching practice. Students had to move from their workplace and from families, for weeks to attend the TP. They found themselves overcrowded at the TP school struggling to get assessed by a roving assessor from OUT headquarters or a local cooperating tutor. Communication with LTP students revealed that most schools were reluctant to accept LTP teachers to do their TP. Some schools were closed during much of the LTP

teaching practice period. As a result most LTP students did not get assessed to the required number of assessments i.e. at least four times.

In this sense, OUT have been using secondary schools as centres for TP. In several documents, OUT admits that the university had most of its student teachers as school-based. Ironically, however, the university has kept on treating them as non-practicing student teachers by requiring them to 1) undergo a second year screening in a TP school (done by the head of school at the TP school)and 2) relocate from their usual workplace and from their families to attend TPs in urban areas.

The TP model has persisted because of its simplicity in implementation and that it does not require much travelling within a region on the part of the university staff. Otherwise following students in their workplace would be easier if regional centres had transport facility and enough education tutors and cooperating tutors. It was found that at the time of the study regional centres had no faculty based tutors. They only had an average of two academic and two administrative officers. As such they could not carry out TP at regional level. The whole TP exercise was to be coordinated at the central level.

However there were two factors strongly associated with O-level schools as a more suitable school for LTP students: school management and presence of other OUT students in school. It was established that most students were satisfied by support from school management. It appears that most heads in O-level were either OUT students or OUT graduates and that had a very positive effect on LTP students. It was established further that O-level schools had more other OUT students than high schools. There were more OUT graduates in O-level schools as well.

11.3 *How do student teachers learn at a distance?*

11.3.1 What is student teachers' attitude on distance learning?

Survey results revealed that most respondents (43%) had found studying at a distance *harder than expected*. About 34% reported to have found DL *as hard as expected*. Only 24% of the respondents reported that they had found DL *less hard than expected*. In other words, 43% of the respondents did not initially anticipate the difficulty involved in studying at a distance. They had made an unrealistic choice to study in a DL mode. The survey further revealed that attitude on DL made a significant difference in decision to stay or drop out of the programme. There was a 25% difference in retention between respondents perceiving DL as *less hard* (82%) and those perceiving DL as *harder than expected* (57%). This finding supports available literature on students' attitude on DL (Askar, 2005); but

goes further to associate attitude on DL and student retention. Interestingly however, attitude on DL appears to improve in school contexts where student teachers felt they were being well supported.

11.3.2 What are the perceived student support needs in the Licensed Teacher programme?

Study findings regarding students' needs revealed that there was a pattern of needs that changed over time throughout the programme period. The pattern reflected students' level of dependence. At the initial stage, students expressed a strong need for more frequent tutorials, improved supply of study materials, improved face-to-face sessions, improved financial support and more supportive workplace. Support needs that received particular attention from the respondents were regular supplemental tutorials (53%), timely provision of study materials (39%), improved financial support (28%), improved face-to-face sessions (20%), and more supportive workplace (14%). These needs reflect students' desperation to continue relying on others for their studies (Dzakiria, 2005). This trend of needs reflects what Lowe (1997) referred to as a lack of distance learning skills among the majority of DL students who have no experience on DL. Their immediate need is therefore integration skills. They have to undergo some transitional issues particularly 'learning how to learn'.

Stage two of the students' needs points to needs associated with improvement of DL delivery system. This trend was appreciated through students' SMS and e-mails. Students' needs shifted to specifically addressing improvement of regional centres, delivery of study materials, practical training and more importantly improvement of communication system particularly on timely communication of results of assignments, tests and examinations.

Stage three of student needs refers to a shift of the needs to devising some coping strategies. They seem to have realized that DL is a different approach to learning that demands a more proactive approach on the part of students, and lessening dependence on the tutor. This pattern of support needs was the main feature of the case studies followed by this study. The aspect of collegiality among teachers in department, school and across schools was in high demand.

11.3.3 What is the perceived school support provided to students of the LTP?

One of the findings in this study reveals that school support was rated by majority of respondents as being just *adequate* (49%) or *poor (*40%). Only 11% of the respondents regarded the level of school support as being *well supported*. However, as a variety of formal and informal practices at school level were identified especially during the case study phase. The perceived support could be categorised into three levels. The first level is contextual and moral support which included a conducive workplace in

which students felt they were welcome and accepted as teachers. This category of support seems to be of the greatest importance particularly its effect on teacher retention. Schools in which the management was regarded as supportive had a high retention rates.

The second level is support of professional development that included the general school practices that were put in place for teacher professional development. The study was able to identify a list of such practices including staff meetings, school-based teacher development meetings, cluster-based teacher development meetings, external seminars, departmental discussions and some level of mentoring. However, these practices were isolated and mostly depended on the individual school initiatives. An important finding in this respect is the new school's initiatives to develop teachers' professionalism. It was evident particularly with the case study schools that the untrained teachers formed the majority. A regular teacher development meetings schedule was particularly associated with this category of schools, in which teachers met regularly, some daily, in order to discuss an aspect of school curriculum.

The third level is support for distance learning, a category of perceived support that consisted of peer tutoring, book sharing, study groups, assisted travels to study centres, and reduced workload. A key finding here was the effect of presence of other OUT students in the school. About 73% of the respondents reported that they received support for OUT studies from their fellow OUT students. It was interesting to find that presence in school of OUT alumni had a very positive effect on perception of school support. This trend of satisfaction increased if the school head was an OUT student or alumnae.

These findings support literature on school support for teacher learning on the role of moral support (Mouza, 2006), professional development (Hoffman, 2003, Marsigit, 2007, Mule, 2006); and support for distance learning (Dzakiria, 2005, Walker, 2002). However support practices in the context of this study revealed another pattern of understanding regarding relationship between moral support, support for professional development, and support for DL. Student satisfaction with the school support was mainly based on moral support, collegiality, and support for OUT studies, in that order of importance. These elements of support were closely related in that welcoming schools were most likely to have some forms of collegial activities, which in turn led to supporting OUT students in their studies.

11.3.4 What is the role of ICTs in supporting distance learners?

Findings regarding the use of ICT in supporting distance learners revealed that there were issues of accessibility to technology, and some socio-technological matters that still need to be addressed before adopting ICT support tools. It was found that access to internet within the school environment was as

low as 6% among all the respondents of the student survey. The most likely moment in which students could access the internet was during face-to-face meetings in teacher colleges and during practical training at the university headquarters or other universities where the training sessions were being conducted. The finding on limited access to computer technologies is consistent with the available literature ((Pityana, 2004; Unwin, 2005). However, the scale of importance attached to availability of technologies for distance learners has not been fully reported. In this study, inaccessibility to internet has been repeatedly cited by both persisters and dropouts as being one of the major factors in learning at a distance and retention. There was a clear need for better support services designed on ICT.

While access to mobile phones was found to be the most promising ICT option among the rural distance learners, it was however revealed that there are some issues that need to be studied and conceptualised before designing support tools based on mobile phones. Three such issues were identified in this study: lack of electricity, low capacity of the mobile phones in carrying large pieces of information, and the beeping tradition among mobile phone users.

The use of mobile phones points to twofold possibilities in addressing school-based support for DL students in rural areas. The first one is the possibility of using SMS for a more efficient, immediate and cost-effective communication between the DL institution and the students. This study finding supports ideas in the literature (Horstmanshof, 2004) on the possibility of using SMS for a more informal communication between faculty members and students as well as to foster the sense of belonging and student integration in the university community. The other possibility is the use of mobile phones for accessing online study materials. The study identified evidence among respondents who were regular users of SMS and mobile internet. While use of SMS and mobile internet is common among distance learners in developed countries, the geographical areas in rural Africa from which respondents used the technologies were one of the most striking findings in this study. Cases of users of mobile phones and mobile internet in remote villages which do not even have electricity were not uncommon. Clearly, there is a diminishing trend in the digital divide in Tanzania due to mobile phones.

11.4 *How do student teachers learn how to teach?*

11.4.1 What are students' attitudes on teaching?

Findings from the student questionnaires revealed that more than 44% of respondents had found teaching *more enjoyable than expected*. Almost 42% of them indicated that they had found teaching *as enjoyable as expected*. However 14% of the respondents had found teaching *less enjoyable than expected*. A finding from case studies revealed that attitude on teaching was closely related with

acceptability of the student teachers by the school community. Furthermore, attitude on teaching was studied through SMS and emails through which the phenomenon was better understood, because responses were collected from both persisters and dropouts. Majority of respondents had positive attitude on teaching including dropouts! The study revealed that four out the six dropouts had actually persisted in studying Education programmes elsewhere. Generally, this study has confirmed previous findings e.g. by Towse *et al* (2002) that there is a move among young school leavers towards teaching.

11.4.2 What are support strategies for learning how to teach?

The study revealed that in most schools (77%) LTP students had fellow OUT students. This is an important finding regarding spread of OUT students across the country. What the finding means is that 77% of LTP students were posted to schools where distance learning was going on among at least two teachers in each of the schools. About 72% of the respondents indicated that they had regular sharing of ideas on teaching and on studies, with their fellow OUT students. This finding was further followed by case study and SMS and emails. It appeared that collegiality was more likely in schools where LTP students felt they were among equals, like other OUT students or OUT alumni. The positive aspect is that OUT students were of different levels. As reported in case of Maendeleo Secondary school - the school had two OUT alumni, three OUT finalists, one in the second year, and two in the first year. Learning and general support from other OUT students took different forms, from sharing study materials (Maendeleo School and Barazani School cases), peer tutoring (Maendeleo School), and equally important by inculcating the feeling of togetherness (Mnadani School).

Study groups were perceived as regular group meetings of OUT students in line with the organisational structure of OUT. As reported in Chapter Six, OUT encourages students to form study groups through which the university could provide support, and through which students themselves could study together by peer tutoring or by inviting OUT tutors. The groups were formed by students from different schools within the school area. Results of the questionnaire revealed that about 42% of the respondents had a group they attended. Lack of opportunity to become a member of a study group was a result of isolated locations of many schools and was the main reason for a need for transfer to another school, as reported in Chapter Seven. Case studies have shown that the peer tutoring nature of the groups provided an opportunity for the members to learn their subjects, but most importantly, to learn presentation skills. As reported in the Madukani School case, a member of the group would normally be assigned to present and lead a discussion on a certain topic.

Observing a senior teacher in a classroom was reported by 55% of respondents of the questionnaire. By observing a senior teacher in classroom and later discussing the lesson, new teachers were exposed to the real teaching environment. The school head at Madukani School remarked that new teachers needed to learn to teach especially from experienced teachers because the new teachers' "ideas on student learning are oversimplified". The need for beginning teachers to observe experienced ones was also pointed out by the head of school (Mnadani School case) who observed that new teachers had to learn to prepare lessons and present and evaluate student learning. In practice however, classroom observation proved to be problematic in all cases followed. Although school heads pointed to its importance in learning to teach, they admitted that schools did not have a clear schedule for such practices, due to various reasons, including lack of time and heavy workloads, and scarcity of experienced teachers.

The idea of having a mix of senior and junior teachers working together was highly affected by the reality in new schools where literally all teachers were inexperienced. Although the head of school would be a senior classroom teacher he/she would usually be a first-time head of school. This trend was observed in all O-level schools included in the Case Study phase. Majority of the other teachers in school were untrained and/or beginners. Following the results of the four case studies, it is apparent that the issue of seniority has little relevance in the new schools. However, respondents (42%) indicated that they had some forms of lesson discussion with more established teachers in their departments.

Discussing assignments with fellow teachers was another form of learning. This form of teacher learning could be associated more with study for OUT than for professional learning, although the two forms of learning were closely related. About 52% of respondents reported having discussions on their OUT assignments with fellow teachers in departments. This finding points to a form of direct impact on schools of the OUT studies. Where such practices occur on a regular basis, discussing academic assignments could have a direct impact on the practice within the school. The finding also points to the need for training institutions to link student assignments with direct classroom and school practices.

Attending school organised training sessions was another observed form of teacher learning. About 10% of the respondents did attend some school-organised training sessions. The sessions include a variety such as TDMs, teacher meetings, and seminars, as reported above. This finding could be ascertained through case studies and SMS. The rare opportunity for formal training for teachers was

reported to be one of the reasons for misunderstandings and teacher dissatisfaction, particularly if the training sessions were associated with some financial gain.

Learning from cooperating tutors comprised of only 4% of the respondents. Most of the cooperating tutors are found around urban areas. They are graduate teachers recruited by OUT regional offices to assist during face-to-face sessions and during teaching practice, and for general support to OUT students. The 4% reflected scarcity of such tutors in rural areas. In all followed case schools, use of OUT cooperating tutors was not observed.

In some case schools, assuming full responsibilities was observed to be another form of becoming a teacher. The duties of a teacher are more than just classroom teaching. In some schools it was reported that LTP students were allocated 'senior responsibilities'. In the Mnadani School case, for example, the student teacher became the school matron, working on top of her 45 periods of Biology, per week. At Barazani School the student teacher became the senior school projects manager coupling with his regular teaching, plus the ten kilometres travel to and from school daily. It is interesting to note that the cited cases revealed that the student teachers were more positive about school practices and school management, in comparison with student teachers who were not provided with administrative duties.

The findings on existence in schools of some forms of teacher learning, particularly those forms directly linked to classroom teaching could be understood as 'active role' of student teachers in learning how to teach based on practice (Eraut, 1994; Kolb, 1984; Schon, 1987; Tyler, 1949). However, there are some serious issues regarding balance between learning the subject, how to teach and learning about the school (Banks, 2000; Perraton et al, 2002); and the value attached to some of the elements in the combination. It has been found that the informal learning in schools existed in isolation and independent from the LTP design. As such, classroom observations, peer tutoring, attending organised seminars, or group discussions did not count in the student teacher's progress. It could be concluded that the LTP design put more emphasis on the academic part of learning such that what went on in schools did not really matter. It is therefore not surprising that comments by some heads of schools did actually reflect the fact that the student teachers had to 'invest' more resources and time on learning for their OUT studies and not worrying about mastering their teaching skills. Clearly this contradicts with the LT induction programme that put emphasis on SBTE elements including inculcating elements of student-centred and reflective teaching.

The findings further reveals that there was no balance between in-school training and out-of-school training (Hobson and Malderez, 2005). The LTP design limited implementation of the programme to treating the student teachers as non-practising teacher trainees. The student teachers therefore were to spend most of the time studying the 'written word' presented to them through course materials, and then briefly at the end of the year getting some supervised teaching practice, in schools identified by the university. The imbalance occurs in that the model did not encourage integration of theory and practice in the daily teaching life of the student teachers. It could be argued that issues of development of grounded theories in teaching among student teachers (Grisham and Brink, 2000, Carlson, 1999, Sankey, 1996) were not addressed using the LTP design.

There was yet another limitation of the LTP design as revealed in this study: lack of a formalised mentoring programme. Having a formal mentoring programme would usually address recruitment and training of mentors (Sundli, 2007; Tellez, 1992) in a way that would enhance relationship between the mentor and the mentee into that of a common outcome, shared learning present in a learning conversation, mutual benefit, and confidentiality (Harrison *et al*., 2006; Ingersoll, 2004; Roberts and Graham, 2008).

11.4.3 What is the teaching performance of student teachers?'

Teaching performance of the student teachers was studied through analysis of TP assessment forms. The four student teachers followed during case studies had a total number of 15 assessment forms. Classroom observations made by university assessors in TP schools revealed that student teachers' performance was affected by some factors like teacher personality e.g., being 'charming and organised', teacher creativity like improvising teaching aids, teaching methods, classroom management, medium of instruction, infrastructural limitations, and other factors beyond teacher control. It was noted that most of the observed factors were those which could be referred to as infrastructural limitations. Comments like, "the class was too large", "unsuitable desks for class discussions", and "inadequate graph paper" featured in this group. Another area of comments that featured in the assessment forms was problems with the medium of instruction. It appeared that there was a potential problem with English Language as a language of instruction because comments pointed to poor command of the language for both the student teachers and pupils.

There was an overwhelming pressure in all assessments for the student teachers to plan and present lessons with group discussions as the major method. It appeared as if excluding group discussion as a method was a ticket to failure or a warranty to 'nasty comments'. The use of group discussion was by

default the classroom method of teaching. However, sometimes it was clear from the very assessment forms that group discussions are not always effective. It has been pointed out that classes were usually larger than normal, desks not suitable for group discussions, and then there was time limitation. Of great concern, the very assessment forms reported that speaking in English was usually a problem especially to the Form one and two learners, and thus confirming literature that there are more fundamental policy issues like language of instruction that need to be addressed (Brock-Utne, 2007; Rubagumya, 1991; 2002;). What could count would be student teacher's creativity in arousing and sustaining pupils' interest throughout the period.

Language of instruction was a common weak point observed and commented in the assessment forms. For both student teachers and pupils, mastery of English Language appears to have been a problem. Most assessors used a language revealing their irritation particularly when a student teacher appeared not to master the language of the instruction, *"Improve your spoken English. Avoid speaking words and sentences which are partly English and partly Kiswahili"*. On the other hand, mastery of English attracted very positive comments when a student teacher appeared to have command of the foreign language, *"Very good command of English. I enjoyed the lesson. It was a good and fruitful lesson".* Problems with LOI for both student teachers and their pupils could be a result of the language policy problems as cited in literature on language of instruction (Chapter Two on Education in Tanzania). Literature on classroom teaching in a typical Tanzanian secondary school classroom reveals that establishing meaningful discussions becomes a problem because of language barrier (Brock-Utne, 2007) and usually classes become silent most of the time forcing the teacher to do the talking.

Findings regarding limitations of the TP model could be grouped into three categories. The first is the finding relating TP to inefficiency in supporting student teachers on a day-to-day basis. This could be inferred by remarks from Frank, the student teacher at Maendeleo, that student teachers are expected to prepare and teach to the assessor's satisfaction, instead of having a tutor to guide the student teacher. Student teachers needed someone who could be involved in the whole process right from planning of the lessons to evaluation of the lesson. Issues of shared learning (Ingersoll, 2004) and collegiality (Abdallah, 2009) do not feature in this kind of support.

The second finding points to yet another area of deficiency regarding the use of TP - TP as a tool for assessment. The comment by Anna (the student teacher at Mnadani) captures this aspect. The student teacher felt that assessors were not helping her to learn how to teach rather they were policing her teaching; and which eventually ended in the student teacher being "shouted at" and being "given some

nasty comments". The issue of power relation between the TP assessors and student teachers (Harrison et al., 2006; Roberts & Graham, 2008; Sundli, 2007; Tellez, 1992) is at stake.

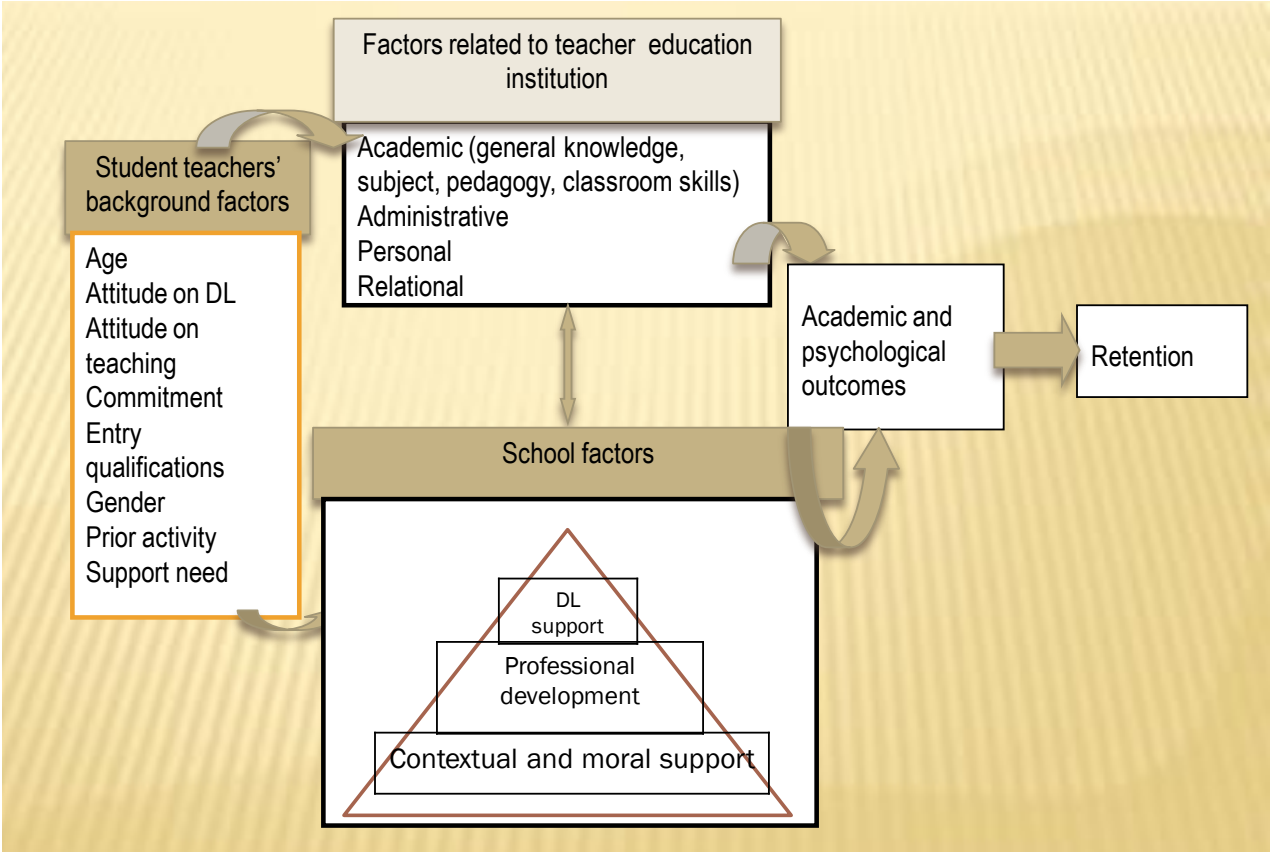
The third aspect is cost and frustration on the side of the student teacher. Comments by Donald (student teacher at Madukani High School) and John (a student teacher at Barazani) reveal that TP exercise for the student teachers became *"a burden"* and "*unbearably costly".* It left rural student teachers struggling to survive in towns as they were required to relocate temporarily to schools in urban areas where they could be observed by a roving university assessor, sometimes not getting the chance to be observed by *"the only assessor in town".* This finding was reported by many other respondents thorough SMS and emails.

11.5 *What were the effects of support on student retention in LTP in the first year?*

The purpose of this question was to establish the impact of student support on student retention. Personal factors, particularly entry qualifications seem to have had a negative impact on retention. This programme selected most students among the best high school leavers who had been employed as untrained teachers. Analysis showed that retention among the direct from high school respondents was low. This factor was supported by another finding, the pull factor, which was the creation by the Government of more spaces for initial teacher training in new university colleges. At least three new university colleges were established at the same period of LTP implementation. Because most LTP students had the entry qualifications for traditional university entry, many of them had a wide choice to leave the programme. This observation was made even before the end of the 2007 academic year when Mkuchu (2008) reported that LTP students who did not persist in the programme had actually joined other universities.

Interestingly, most of the dropout respondents indicated having continued with the same degree programmes in education. This finding is supported by the fact that more than 42% of the respondents had responded to have found DL *harder than expected*. In contrast, only 14% of respondents had found teaching *less enjoyable than expected*. The result therefore was that while most LTP students enjoyed teaching, they may have been disappointed by the design of the LTP work and study programme. However, further analysis of questionnaire, case studies and students' SMS pointed to some push factors most of which could be associated with a feeling of isolation and lack of study skills for DL. Students had a feeling that they were not supported well enough for their studies, especially at their workplace. This perception was mainly linked to problems of acceptance at school as teachers, lack of peer support, and lack of suitable facilities at school.

Figure 11—1: A retention model for school-based distance learners



The most influential factor for student support at school level was the presence of OUT students in school and in departments. The feature of OUT students and alumni in school was closely followed and found that although the percentage of OUT graduates was as low as under 10% in both O-level and high schools, in most cases, the OUT students and alumni in O-level schools were most likely to be heads of school; where the respondents appeared to have a better retention. Better retention in O-level schools was also highly related to presence of a majority of untrained teachers in such schools that led to formation of 'collegiality' based on teachers' lack of qualifications. This fact was established through case studies in which in all four cases there were some OUT students and/or alumni. Heads of all three O-level case schools were OUT students/alumni. In the only high school case the head of school was not.

One of the results from this study is the fact that despite some deficiencies in the context of LTP that led to reliance on mostly uncoordinated and informal ways of teacher support, most LTP students were still satisfied with the programme. An explanation to this dichotomy could be effective management of the feeling of isolation predominant among new DL students. Some student teachers seem to have dropped out because they felt they were being labelled and mistreated because they were untrained.

This notion is clearly exhibited by most students who were posted to work in high schools. The students' experience reflects what is referred to as powerlessness of new comers with overriding need for security and inclusion in the school community (McNally *et al.*, 1994, Roberts and Graham, 2008). In the context of LTP it has been found that the whole public atmosphere was against fast-track teacher training and deployment, with trained teachers, with their teachers' union leading the battle against the policy.

In an endeavour to create a collective affiliation, LTP students were found to have a clear need for peers. Analysis of questionnaire results revealed that the mere presence of other OUT students in the school increased student retention from just above 50% among schools without other OUT students to almost 70% among schools with other OUT students. A similar trend was revealed by presence of other OUT students in departments, increasing retention from 60% to 72%. The paradox of the results however is that support from peer OUT students did not increase retention. It is clear from analysis of the questionnaire that while support from fellow students was high (64%), retention did not increase by support from fellow students. This finding points to the fact that what counted for teacher retention in the schools was not necessarily the academic or professional support they received from the fellow OUT students but the mere presence of the other students formed what literature refers to as *collective affiliation* within a training institution (Kember, 1995, Lowe, 1997) and *collegiality* within a workplace (Nias, 1998, Keedy, 1991, Abdallah, 2009, Gonzalez, 1995). The key finding here is that LTP students had a need for identity within the OUT and their workplaces. This need seems to dominate other needs - academic, professional or material.

When new DL students search for collective affiliation (Kember 1995; Lowe 1997), they seek to get integrated into the life of a training institution. As they are new to the DL mode of education they usually develop a feeling of isolation, disappointment and this could end up in dropout. Walker (2002) demonstrated new DL students' desperation for interaction when he came up with an article entitled "Is there anyone there?" summarizing a plea not just for information but also for contact, for human contact. Such feeling of isolation inhibits any possibility of dialogue in learning and interferes with the learning process, and dropout could follow (Simpson, 2002).

There are two important issues regarding the feeling of isolation due to remoteness of the schools. Extreme cases were reported by the respondents expressing a need for transfer to other schools. A need for transfer to another school was negatively related to student retention. All respondents who needed transfer to another school were not retained (presumably they were never given the transfer).

Another equally important issue is that a feeling of isolation expressed by the need for transfer was less severe in schools with other OUT students. About 43% of respondents who had other OUT students indicated a need for transfer. The rate increased to 73% among schools without other OUT students.

Findings in this study can be summarised using the retention model suggested in Chapter One that views retention in terms of background, academic and environmental factors. Background factors in general have no significant correlation with student retention, although some variables like entry qualifications and age may make some difference. However, by adding to the background factors student support needs, it has been found that student need to be posted to a better school has a significant negative correction to retention. Interestingly, the need for a transfer to another school was mostly expressed as pursuit for better access to peers and study centres where the students could meet with other OUT students on regular basis.

Academic factors such as performance in assignments and tests seem to have no relationship to decision to continue or dropout. All respondents in the dropout category did not point to failure in assignments or tests. However, most of them were concerned with the pace at which test results were being released. As noted elsewhere, in the first half of the 2007 academic year, LTP students attended examination sessions together with the rest of OUT students. As such their test results were mixed in the pool of all students' data. The process of marking and recording and sending back the results to students took longer than expected. However, this issue was immediately solved by OUT by letting LTP students do their tests and examinations during their face-to-face meetings. Marking assignments and tests as well as releasing results to students were to be done immediately after the face-to-face meeting.

School factors seem to have played the most significant role in student retention in LTP. The new untrained teachers were posted to new rural schools that lacked some basic facilities for them to integrate in the teaching profession as well as excel as distance learners. While the Government required schools to run mentorship programmes for the untrained teachers, it appeared that schools were not provided with technical and financial support to initiate the programmes. Most of the schools were too remotely built to attract new teachers to work in especially those who had to make frequent travels to urban areas, like the LTP students who were to be in towns for study, discussion or some other administrative issues. Some students especially science students appeared to be more affected by lack of resources in the schools.

Acceptance in the schools appears to be the immediate support the LTP students required. In some schools especially high schools untrained teachers seem to have been denied recognition and a favourable working relationship with other teachers. Presence in school of graduate teachers was found to correlate negatively with retention, reflecting how resistant the 'trained teachers club' was to the untrained ones. The fact that most new rural schools lacked graduate teachers therefore became a positive aspect for teacher retention, and in this case retention in LTP. Presence in school of other distance learners in school seems to be the only variable in the school factors that kept majority of the LTP students in the programme. The role of the other distance learners could not be expressed in terms of academic or professional support though. Students simply needed other distance learners to affiliate with (Kember, 1995).

What do these findings suggest in practical terms? The findings point to a need for a different perception on DL student support and retention. Clearly theories on distance learning that prescribe the use of technology as a way of facilitating student interaction could be effective only if the technologies were available in the rural areas. Because that is not always the case, as revealed in this study, the possibility of DL student interaction is the physical interaction. Schools as organisations present themselves as a perfect place for nurturing human contact by integrating distance learners. A different support model for school-based distance learners needs to be used in contexts such as rural Tanzania.

The proposed model for retention of school-based distance learners developed as a result of this study (Figure 11-1) suggests a need to consider school (workplace) factors when planning DL programmes. Although the model incorporates the general concept of inclusion of environmental factors, from Bean and Metzner (1985) it does not use the original variables, particularly those appearing to be irrelevant to the context of most African DL institutions, but it adds support needs to the background factors. Environmental factors as presented in the proposed model involve variables conceived and presented in a pyramidal structure. The base of the pyramid contains contextual and moral support, followed by professional support and then at the apex, support for DL. The model recognises a relationship that exists between environmental factors and DL institutional factors and that the interplay of DL institutional and school factors leads to perceived academic, professional and psychological satisfaction; which in turn leads to decision to stay or dropout.

Chapter Twelve: Study Conclusion, Recommendations and Evaluation

Please be good enough to put your conclusions and recommendations on one sheet of paper in the very beginning of your report, so I can even consider reading it

- Winston Churchill (1874-1965)

12.1 *Overview of the chapter*

The Licensed Teacher Programme was an initiative designed so as to allow untrained teachers to undergo a DL degree programme while working in schools. In 2007, the first batch of 1500 (out of the whole population of untrained teachers in the country) was selected for the programme. MoEVT had invested in the LTP in collaboration with OUT expecting a return by having the untrained teachers graduating in three years time, in various degree programmes. The planning of the programme appeared to recognise the importance of school in training by stipulating the role of mentors in supporting the untrained teachers. This study was designed to follow the programme in its first year of implementation. This chapter makes evaluation of the research process and attempts to highlight the general findings and contributions of the study to the board of knowledge and for improved practice in teacher education designed in a distance learning context.

12.2 *Evaluation of the study*

By following LTP, the study sought to explore support practices in DL teacher education programmes. Of particular importance, the study explored the role of schools in supporting school-based DL student teachers. The study used a questionnaire, case studies and SMS (in that sequence) in a 'mixed model' approach. The use of several methods in a single social research is viewed as the best way since 'it is better to look at something from several angles than to look at it in only one way'. A questionnaire was used to collect general data from a sample of the participants; to explore the perceived areas of support to be able to complete their courses in time; collect information on school capacities for supporting student teachers and to establish a general understanding of student support at school level. It also was used to identify cases of interest that would be purposively sampled and studied in the second phase of the study. The second phase (case studies) was used to explore in-depth the central theme of student support at school level. Data collection continued by following both questionnaire respondents and the case studies using SMS.

There were some limitations of the study. Unlike sampling for the survey, which used a single stage cluster sample that could be representative of the LTP population, sampling of case studies was done

purposively and was guided by the good practice approach to case studies. The findings obtained from such case studies may not be those of typical schools and students of LTP. The limitation of sampling also involves respondents for SMS and emails who were self-selected. There was another limitation with fewer respondents for some analyses to be carried out in a representative way. Respondents from high school for example, comprised only 5% (n=12) of the sample making comparison with the other 95% (n=209) rather illogical. This was also true with respondents from categories such as the over 30 age group (n=9) being compared with the 20-25 (n=161) and the 26-30 (n=51) groups.

However, I would like to point to four issues on the methodology of the study. The first is seizing the right opportunity for data collection. I was once asked why the survey response rate was almost 100%, and I responded that it was so because I had used a single-stage cluster sample, for which it was possible to study all subjects in the cluster. But that was only one part of the answer to the question. The other part was the fact that the survey took advantage of the opportunity of the first face-to-face meeting of LTP students, which was convened in April 2007, when everyone was very enthusiastic about the programme. The survey instruments were distributed and immediately collected, at the meeting. It is important also to appreciate that recruiting samples in an organisational setting like a college or a school usually leads to high response rates because the respondents are found in readymade groups. The use of cluster samples, especially if the clusters have representative qualities of the population as a whole, could lead to high response as was the case with this study.

The second issue regards the use of a guide to preparation of the questionnaires (presented in Appendix 1). I found it quite useful to have a mapping tool to guide formulation of questions and to guide presentation of the questions to eventually lead to answering the main question of the study. In this study, the survey aimed to collect data on students' perceptions on support provided by their school to student teachers of LTP. By using the mapping tool it was possible to identify an inventory of questions to be included in the questionnaire and possible answers from respondents. Of course, the items and answers could change depending on results of piloting.

The third issue is the use of diaries during the case study phase. I found diaries particularly useful in providing additional themes and perspectives not previously conceived. In this study, respondents were asked to keep a diary, i.e., entering information relating to all activities, with particular detail for those activities related to teaching and studying. For other personal activities they were asked to indicate the time without much detail. The diary entries were later used as basis for interviews, and they helped keep memory of events. After reading the diary entries, issues such as the role of school environment

and distance from home shaped my perspective on the role of contextual and moral support that had featured in the data collected through the questionnaires. Most diaries revealed the fact that teachers (and students) had to walk long distances to school, spend some time in school and still worry about walking back home. It was rare to find a student teacher with extra time for socialising and sporting.

The fourth issue is related to use of SMS for research. The use of SMS and eventual phone calls and emailing was very useful, particularly its ability in tracing respondents who had already dropped out of the programme. Study progress among the respondents was constantly followed throughout the study period. Some potential with the use of SMS as a research tool has been established in this study.

- It is easy to recruit SMS respondents through a general questionnaire. This study was designed as a mixed model in which instruments of the study were related to each other. The questionnaire, apart from establishing some general information from the respondents, proceeded to seek permission from the respondents to use their personal data (names, telephone number, address, emails) for further contacts. Interestingly, all respondents who returned the questionnaires provided their personal contacts and they were willing to get contacted for more information.
- It has been reported that SMS research could be affected by its low response rates, usually as low as 7% to 12% depending on the question/subject of research (Griffin *et al.*, 2006). That could be true only in comparative terms. In comparison with questionnaires, this study saw SMS having a lower response rate, but not the lowest; emailing was. This study recorded a response rate of 28%, indicating that response rate for SMS can improve, particularly if mobile phones are the most readily used technology among the respondents.
- It is easy to collect data immediately. This study has shown that SMS has the potential of generating data very quickly, mostly within a day. In this study 75% of SMS replies were received in the same day and the rest in the following two days. It is very unlikely to receive SMS replies after three days.
- SMS led to communication by telephone interviews for detailed data collection. The use of mobile phones has been part of life and has its implications that ought to be followed when using SMS for research purposes. One basic principle was that of responding to beeps, by calling. Responding to beeps was important in this study as most of the respondents used beeping instead of responding by SMS.
- Similarly, SMS led to emailing. A small number of respondents had access to internet. This fact made it difficult for majority of respondents to respond to emails sent by the researcher.

However, when SMS were disseminated asking them to use emails if they had access to, more email users emerged. One email respondent actually opened an email address a year later and responded to the SMS that asked for communication through emailing.

This study recommends use of SMS as a research instrument in further educational research, particularly as a part of research instruments in a mixed model approach. The use of SMS for research purposes would be particularly useful for international research studies that demand a developmental data collection.

12.3 *Research conclusions and contribution*

Recruitment and deployment of untrained teachers directly to rural schools could have made an impact in reducing teacher shortages in the new schools. It is hard to imagine the education system without the untrained teachers particularly at the time when teacher colleges could not cope with the growing demand for teachers. Unfortunately, the move did not receive a warm welcome. In fact it was condemned as unprofessional and a source of quality jeopardy in the secondary education sub-system. Public disapproval could be echoed in the media; and with a great impact on support to the untrained teachers, the Teachers' Trade Union of Tanzania refused to recognise them as teachers. Many LTP students who dropped out of the programme reported that they were not welcome in the schools and that they felt they were being singled out as a liability.

Lack of a clear strategy for implementing a mentorship programme for the new and untrained teachers formed another contextual setback for LTP. At least in the initial stages of deployment and induction of the licensed teachers it was pointed out that mentoring would be important and that some roving mentors would be supporting the untrained teachers. The reason for using roving mentors instead of school-based mentors was the reality that in such new schools in the rural areas a majority of the teachers were new and untrained. This reality was confirmed in this study. For some reasons however this plan did not work out. Instead, schools were directed to appoint and train school-based mentors for the purpose. This study found that schools did not have further guidance or technical and material support for preparing the mentors. However, some schools appear to have had some mentorship programmes.

Another contextual issue refers to the design of the programme in which the role of school appears to have been taken for granted, as the predominant approach to teacher education was university-based. In fact, schools in which LTP students were working were not considered as TP schools such that

during TP students had to relocate to some urban schools where they had to teach and get assessed by university assessors and/cooperating tutors.

Untrained teachers, like all other school teachers, were allocated schools by the regional education office. School allocation seems to have had a great impact on the new teacher retention, as many particularly those posted to remote schools regarded their new schools as unsupportive to their DL studies. Regional officers seem to have had no consideration of the fact that the new teachers had to undergo some DL studies, or upon learning that the teachers were undergoing a DL programme still could not arrange for change of school for those affected teachers. Like the school heads the regional educational officers seem not to have been involved in the planning of the programme.

The nearest official support mechanism for the OUT students remained to be the OUT regional centre. Through this study it has been found that most regional centres were regarded by the respondents as being too far away from them. Student teachers had to incur more resources and time to travel to the centres. In some of regions the centres did not render services to the students' satisfaction such that students could not receive on time some study materials, assignments and feedback.

There were two school settings as revealed by this study. In high schools a majority of the respondents reported that although they had been enthusiastic and felt lucky to be posted to high schools, most of them were not welcome. In some high schools the LTP students like the other untrained teachers were treated as untrained workers, not teachers. In some other schools they were stigmatised, labelled and in some cases told that the school did not need them. In O-level schools respondents seem to have found a more challenging context in that the schools were mostly new and underdeveloped. There were not enough teachers and no teacher houses. However, most of the respondents in O-level schools felt welcome by the school community. One reason could be because the LTP students found themselves among other untrained teachers who together formed the majority among teachers.

While literature in DL insists on learner independence and self-study and autonomy and such individualist qualities, this study led to a conclusion that DL students based in a workplace such as schools needed more support from colleagues. As revealed from the survey, initially respondents reported that they required regular tutorials on their courses. The possible way they could fulfil that was through peer tutoring. However the whole trend in support needs kept on changing with time. Support needs could then be put into three categories: i) the need for induction into the DL mode in which DL students required regular tutorials, DL study skills, and encouragement, appreciation and material

support; ii) need for improved teaching and learning process in which respondents required timely supply of study materials, improved communication system, improved study centres and libraries, and improved practical training; and iii) a need for collegiality in which respondents expressed a need for study groups and improved peer meetings.

Perceived school support was understandably low with about 40% of respondents reporting poor school support. The predominant school supporter was a fellow OUT student. Other forms of support were relatively less developed. The support forms included senior departmental teachers, fellow teachers in the department, private tutors, and others (which included family members and neighbours). Observed school support however revealed that the daily school practices regarding teacher professional development had a contribution to teacher learning. Although mentoring was a new concept and that most schools faced difficulties in implementing it, in schools where it was implemented, departments were given the responsibility. The department head performed the role of a mentor as part of the daily official duties. The strength of this approach was that senior teachers did not have to conceptualise mentoring as separate from their daily roles. This was particularly important since the Government did not contribute extra resources for the purpose of school mentors.

Teacher development meetings were another form of support that was observed in this study. It was observed that in schools where a majority of the teachers were untrained, regular teacher meetings were scheduled for the purpose of discussing curriculum issues. Other forms of TDMs were cluster-based for which teachers from within a neighbourhood met regularly in order to have discussions on a teaching subject; and external seminars for which teachers were selected to attend. This study recorded a negative impact of external seminars on teacher satisfaction with school support. It was reported that particularly new teachers were not being selected to attend external seminars even when they were the ones teaching the subject for which the seminar was prepared.

Schools made a great contribution regarding supporting OUT students. The study revealed that in some schools LTP students were given reduced workload to enable them have more time for study. In some schools LTP students were provided with assistance for regular travel to the regional centre and library. In a very innovative way, the study noted a school in which an OUT special collection was established in the school library where OUT students could access various study materials and reference books donated by OUT graduate teachers in the school. Generally, presence of OUT students and graduates in schools had a clear impact on the LTP students.

The study revealed three main causes for student dropouts: personal background factors particularly entry qualifications for which students with good entry qualifications were in turn more likely to join some other universities; feeling of isolation for students who had no other students or who had been posted to schools that did not have a culture of collegiality; and poor school facilities for which students were not happy with poor school facilities to support their studies.

School support identified by students and those observed during case studies were mainly informal – some little things at school however seemed to make an impact on retention. As previously noted, the main factor that revealed impact on student retention was presence of other OUT students in school. It was discovered that presence of other OUT students in school had more impact on retention than even the actual support from the fellow students. This indicates that what actually retained students was a feeling of collective affiliation and not necessarily the actual support from the fellows. This fact was also observed through the presence of other untrained teachers in school. The majority of untrained teachers in a school played a shield role protecting the LTP students and the untrained teachers against any discrimination and stigmatisation. In a final analysis however what retained the new teachers was moral support from the fellows and not necessarily academic or professional support.

Regardless of the limitations of the study, the following synoptic points could function as a summary of the major contributions of this work.

- There is a gap in perceptions on school-based teacher education between the Government and the teacher education institutions, as revealed through interviews and through practices in teacher training programmes run by the two partners. The LTP method of assessment used by OUT contradicted with the school-based experience of learning to teach, which was initially introduced by MoEVT during the induction programme. There is a need to address the limitations of the teaching practice assessment model of teacher preparation. A mentoring and collegial relationship at school level appears to be more promising in both learning to teach and student retention. It would be important to address the issue by integrating researchers from local teacher universities in various externally driven studies concerning teacher education.
- DL appears to have many infrastructural challenges such that students are likely to lack some basic materials and equipment necessary for DL. There is a need to address DL issues such as timely distribution of study materials and more effective communication systems with DL students, more effective face-to-face sessions, more supportive regional study centres, and investment on accessible DL technologies. These issues have constantly featured in the

student survey, case studies and SMS and emails. Students' appreciation of the DL mode is still low, thus affecting retention.

- Collaborative partnership, especially the role of school in teacher education appears to be significantly important. While LTP made use of partnership between the Ministry of Education and Vocational Training and the Open University of Tanzania, it appears to have assumed mutual participation from teacher colleges, regional education officers and schools. Evidence from this study has revealed that involvement of the other partners was not effectively exploited.
- There is a potential for various innovative initiatives at school level with regard to supporting school-based DL student teachers. Heads of school appear to have devised various ways of addressing new teachers' pedagogical limitations by introducing schemes such as regular staff meetings, teacher development meetings, departmental discussions, peer tutoring, book donations, assisted travel to study centres and reduced workload. These informal ways of support appear to exist without policy guidelines.
- There is a possibility of adopting mobile technologies for DL student support. The innovative cases reported in this study open this opportunity if DL institutions could adopt them.
- Retention is a complex issue particularly in DL teacher education programmes. Both teaching and DL appear to have potential attractions for dropout rather than persistence. The combination of the two makes the phenomenon even more complicated. However, it would appear that improvement on the teachers' working and living factors could improve retention in DL.

12.4 *Study recommendations*

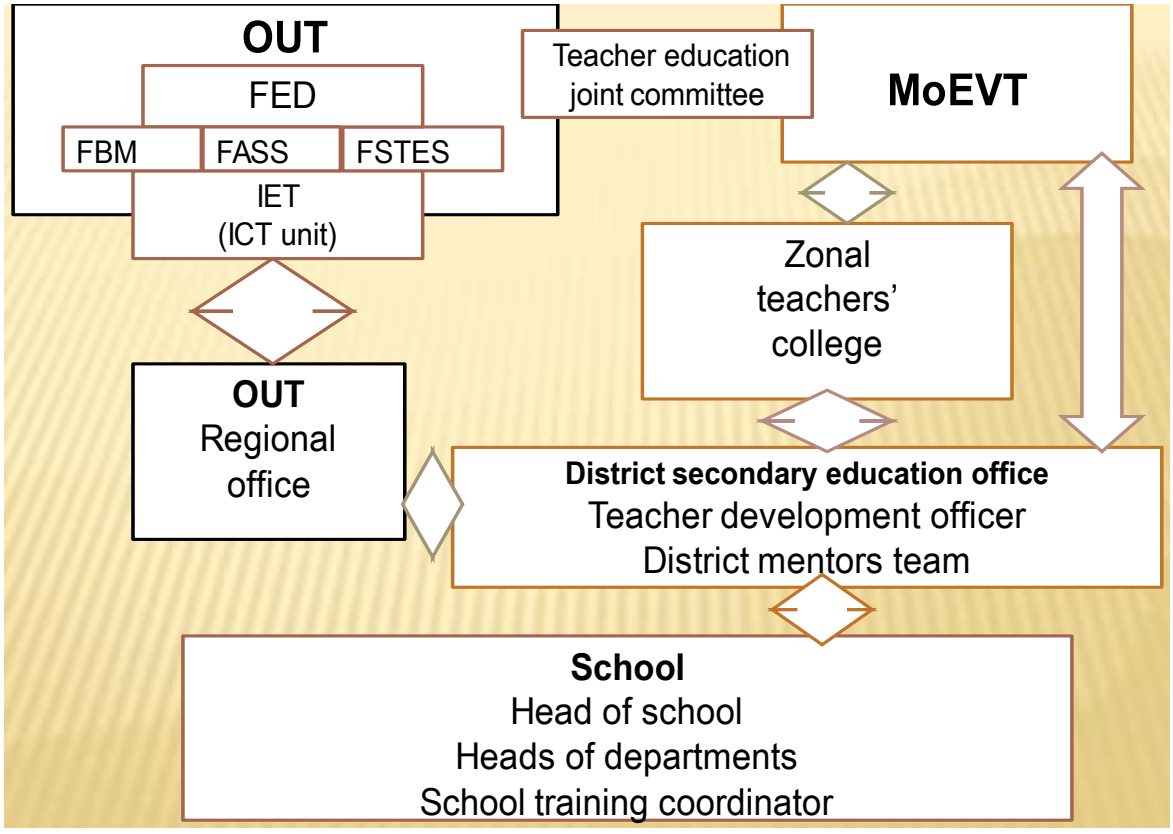
12.4.1 Recommendation for improvement of OUT practice

The limitations of TP as a model for teacher preparation, as revealed in this study and many other previous studies, call for change in the practice. Day-to-day teaching of DL student teachers should count on the student teachers' assessment so that student teachers can directly associate the academic and pedagogical knowledge obtained from the *written word* they read for their DL programmes, with classroom and school practice. The recommended model (Figure 12-1) stresses the role of the Faculty of Education (FED) in developing ideas that address reflective learning and learner-centred elements of teacher education. Ideas on school-based teacher education, in particular, need to be emphasized. The model proposes a shift from making TP supervision and assessment at some selected schools, in only a few weeks per year, into a day-to-day mentoring process throughout the

period of the degree programme. The new model therefore proposes a partnership with two other important partners, district secondary education departments and the schools in which untrained teachers work.

The role of ICT in teacher development could be more articulated by investing in student support tools based ICT. The Institute of Educational Technology (IET) at OUT could be more useful in researching and developing the tools in collaboration with FED and other faculties. This study established that the mobile phone was a single most promising technology which could be accessed by more than 95% of respondents. There was evidence in this study that the use of mobile phone among distance learners could be more than just information exchange. It was discovered that students could share some "leaked exam questions" through SMS. Through mobile internet, a student teacher based in a remote rural school could use a mobile phone for sending and responding to emails. The student teacher could even access online study materials and use the materials for doing assignments and prepare for exams. However, the use of such promising technology-based initiatives was reported to be informal and based on students own creativity. The use of mobile phone for online learning could be more promising than the use of computer particularly in most rural areas. OUT and other DL institutions could use this opportunity to serve students in a better way.

Figure 12—1 Proposed organisational structure for school-based teacher education



Effective communication between the training institution and distance learners was one of the most consistent support needs among respondents of this study. It was found out that some students could not attend residential sessions or fail to write an assignment because they had not been provided with information at the right time. At some moments students had to travel to regional centres just because they needed to get hold of some information about some general administrative issues. The general communication system within OUT was that of sending information to regional offices where the information was posted on the students' notice boards. The same information would also be available on the university website. For students to access the information they needed to travel to the regional centres or to a nearby internet cafe – time consuming and costly. Mobile phones could be used for improving administrative operations in DL institutions. Particularly, it is recommended that students be provided with administrative information through mobile phones.

12.4.2 Recommendations for improvement of MoEVT practice

This study has established that the most supportive factors at school level are those related to contextual and moral support. The context in most rural secondary schools was found to be unsupportive to DL: poor living and working conditions, underdeveloped departments within schools, predominance of untrained and inexperienced teachers, and distance from the urban centres meant that the distance learners could not afford frequent travels. Therefore retention of student teachers in a DL programme and retention of new teachers in school are interrelated phenomena. Particularly in LTP, the new teachers were, by agreement, made aware that their continued participation in the programme was to be determined by their continued working in schools. Students who did or did not continue into the second year of the programme seem to have had a combination of the two: work-related factors and DL study factors. It is suggested that the combination makes the decision to persist or not to persist stronger. It is therefore recommended that improvement of school factors will improve retention in DL studies of the school-based student teachers. The Government needs to ensure that secondary schools are properly built and furnished because school facilities do affect not only learning for pupils but also for their teachers, particularly those involved in courses such as LTP and other DL programmes.

Implementation of mentoring programmes in secondary schools requires a significant policy change on teacher education. Some countries have issued policies prescribing school-based teacher education to all teacher education institutions. Some have directed schools, local governments and schools to implement probationer training programmes like mentoring. Some countries have left teacher education

institutions freedom to train teachers. Tanzanian secondary schools need mentoring programmes because of i) school-based training for student teachers ii) the vast majority of school teachers who are untrained or undertrained; and iii) in-service teacher professional development. One opportunity towards adopting a more practice-based teacher education in Tanzania is the fact that Government-run teacher education programmes have already incorporated school-based training in which student teachers spend one year in college and another year in school. The Government could use this opportunity to study mentoring models, stipulate a policy and support local governments and schools to implement mentoring programmes.

The recent establishment of secondary education department at local government level is another opportunity. This opportunity could be effectively exploited such that local secondary education officers could establish teams of roving mentors within their districts, provided they do not form another wing of school inspectors. Like agricultural extension officers who work with farmers in fields to improve farm productivity, mentor teams should strive to support beginning teachers and in-service teachers to improve their quality of teaching and most importantly to improve pupils' classroom performance. It is recommended that district-based mentor programmes be implemented because, as reported earlier, most rural secondary schools lack trained and experienced teachers. System-wide mentors have shown to be effective by supporting teachers not only for exposing teachers to a "bigger picture of teaching" (Hastings, 2007) but also for overcoming infrastructural and technical limitations (Namcharoensombut *et al.*, 2009) particularly since mentors need to be properly recruited and effectively trained before deployment. Through partnership agreements, local mentor teams could be used for supporting student teachers from both MoEVT teacher colleges and universities.

There are a range of philosophical and practical issues that need to be underscored and considered in designing and implementing training programmes for the untrained teachers. The proposed model (Figure 12-1) is a redesign of the current LTP organisational structure (Chapter Six) and its fundamental point is making local governments (instead of regional education offices) a key player in teacher development, with technical and material support from MoEVT and teacher education institutions such as OUT. The new model recommends creation of a steering committee for LTP that would involve representatives from MoEVT, OUT (from all faculties involved in teacher education programmes as well as regional directors), zonal teacher colleges, local secondary education offices, and heads and teachers in secondary schools.

12.4.3 Recommendations for improvement of practice in schools

It has been found that high teacher qualification at school level is negatively related to school support for LTP students and leading to feeling of isolation among LTP students. This has been further found to be a result of a negative attitude among teachers on the use of untrained personnel in teaching. The implications are far deeper as the attitudes affect teacher relationships at school. At the same time, it has been established that a sense of isolation among student teachers can be overcome by collegiality among teachers in school. It is therefore recommended that training should be conducted to reflect on working as a team so as to improve not only teamwork and staff performance and retention of beginning teachers but also school performance in general.

Recommendation on use of system-wide mentors does not exempt schools from establishing "buddy" programmes and other support strategies within departments or schools because of the need for student teachers and beginning teachers to be exposed to learning about the specifics of the school i.e., the situated learning. It is therefore recommended that schools develop their own teacher professional development plans through which various professional development strategies would be outlined and implemented. For effective coordination of school mentoring, it is proposed that a senior teacher be nominated and trained for the post of school teacher development coordinator and that person be the think tank and driving force in coordinating departmental-based buddy programmes. The head of school would work with the coordinator in planning and implementing the strategies. One of the roles of the district mentor teams would be supporting schools to effectively develop their own support strategies. In Chapter Nine a range of school-based support initiatives were presented that included departmental meetings, staff meetings, teacher development meetings, chance discussions, book donation, sharing of study materials, and peer tutoring. Schools could be encouraged to develop these and similar important practices.

12.4.4 Recommendation for further research

A study could be designed to establish ways in which mobile phones could be used for online learning, particularly as it has been established that almost all respondents, the DL students, had access to mobile phones, but mostly used for calling and SMS. The study could look into possibilities of having internet connectivity across different types of mobile phones, affordability of internet connectivity among DL students, and possibly an experimental study on its impact on learning outcomes. Similarly, since the study had some anecdotal evidence that there could be a great potential for peer interaction among distance learners, through mobile phones, a large scale research could be carried out to study mobile

phone-based models, analogous to computer-based virtual discussion models, in which such interactions could be directed into academic peer support among distance learners. Other technological issues could be involved such as the solar technology for generating power and the possibility of connecting mobile phones to cheap computers. The issue of connecting mobile phones to computers could lead to a solution for many DL students, like those followed in this study, who have already started using mobile internet but cannot 'download and print 'the materials.

12.5 *Conclusion*

Based on the findings of this study, I have made some recommendations for improvement of practice as well as for future research. The proposed model on teacher education suggests that training of the untrained teachers who are already in schools and those to be deployed in future, should be approached using the school-based approach. Recommendations on future research in this topic have pointed to the need to study and design student support tools based on mobile technologies. Other researchers may find my mixed model approach to the study useful to their studies. They may also wish to use ideas on SMS and diaries as techniques in data collection.

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Appendices

Appendix 1: A guide to formulation of the questionnaire used in the survey phase

The survey aims to explore students' perceptions on the nature of student support provided at the school where they work; and the factors that explain the reasons for such perceptions. Hence the general mapping of the instrument is shown in the following inventory:

Issue	Question focus
What school-based support services will be mentioned by the student teachers?	Is there opportunity for school-based professional training, informal peer interaction, peer lesson assessment, formalized mentoring, school-based private tutorials, school-based cooperating tutors, others?
How will the student teachers describe the school support services, as well as OUT support?	Are student teachers: well supported, adequately supported, or poorly supported?
Could type of school affect the students' perceptions on school-based support?	Is the school a high/ordinary, an urban/rural, having a graduate teacher(s), having a graduate teacher(s) from Open University of Tanzania, having one or more other OUT students, having a library useful for education studies, having telephone connectivity, having internet connectivity?
Could gender differences affect the students' perceptions?	Is the student teacher male or female?
Could age differences affect the perceptions?	What is the age of the student teacher?
Could past experiences affect the perceptions?	How many years of work experience does the student have? What kind of employment did the student have immediately before joining teaching?
Could subject area of study affect the students' perception of school-based support?	Is the subject area: sciences or arts and social sciences What particular course of study?
Could attitude towards teaching affect the student teachers' perceptions of the school-based support services?	Is teaching the kind of job the student teacher is interested in? Is the student teacher likely to seek for some other kinds of jobs of his/her interest?
Can the student be contacted for further study?	Is the student willing to participate in the next phase of the study? Can the student provide personal and school contacts?

Appendix 2: The student questionnaire

A SURVEY ON SCHOOL-BASED SUPPORT SERVICES FOR THE LICENSED TEACHER STUDENTS OF THE OPEN UNIVERSITY OF TANZANIA

A study is being conducted to find out school potentialities for supporting student teachers studying at a distance. It is hoped that the findings of the study will lead to more understanding of how well student teachers by distance can be supported at school level so that they progress and complete their studies within time. It is thought that you, as an OUT student, will benefit from the findings of this study following recommendations that will be made as a result of the study. Hence, your participation in this study is highly encouraged. You are kindly asked to respond to the following questions by simply putting a tick **(√)** or circling or filling in a blank space provided. The responses that you provide will be treated anonymously and will only be used for the purposes of this study. The exercise will take you only a couple of minutes to complete. Remember that this is NOT a test and that there are NO correct or wrong answers. Just put an answer that you think is appropriate. When you have completed the questionnaire, please return it to the person who gave it to you.

1. Are you male or female? *Please circle the appropriate number.*

   Male 1
   Female 2

2. What is your age? *Please circle the appropriate number.*

   Under 20 1
   20 – 25 2
   26 – 30 3
   Over 30 4

3. What is your area of study? *Please circle the appropriate number.*

   Sciences 1
   Arts and Social Sciences 2

   Please mention the teaching subject(s) in your degree programme_____

4. How true are the following statements about your school? *Please use a tick* **(√)**

	YES 1	**NO 2**
My school is a high school		
My school has a teacher(s) with degree in education		
My school has a teacher(s) with degree from the Open University of Tanzania		
My department has a teacher(s) with degrees		
My department has a teacher(s) with degrees from the Open University of Tanzania		
In my school there is one or more other OUT students		
In my department there is one or more other OUT students		
The school library is useful to my studies		
The school has a reliable telephone network		
I have access to internet services within my school area		

5. What were you doing immediately before joining teaching? *Please circle the appropriate number.*

Direct from secondary school	1
Direct from college	2
Employed elsewhere	3
Self-employed	4
Unemployed	5

If previously employed, mention type of employment

_____

6. Do you usually get support for your OUT studies from one or more of these? *Please use a tick* **(√).**

	YES 1	**NO 2**
A fellow OUT student		
A fellow teacher in my department		
A senior teacher in my department		
A cooperating tutor based in my school		
School organised training sessions		
Private tutorials within the school		
OUT tutor		
Other (Please specify below)		

7. I find studying at a distance..... (*Please circle the appropriate number*)

Harder than expected	1
As hard as expected	2
Less hard than expected	3

8. In what areas (if any) do you think you need greater support in order to enhance timely completion of the units you registered for in 2007? *Please use the space below*.

9. I find teaching..... ……(*Please circle the appropriate number).*

More enjoyable than expected	1
As enjoyable as expected	2
Less enjoyable than expected	3

10. For each of the statements below provide a score by putting a tick **(**√**)** under the number that you think describes support services at your school. The numbers range from 1 = very often to 5 = never.

	Very often				Never
Statement	**1**	**2**	**3**	**4**	**5**
School management is supportive of my OUT study					
School provides enough time for my OUT study					
I learn by observing a senior teacher in classroom					
I usually discuss my lessons with a senior teacher in the department					
When I have OUT assignments I discuss with my fellows in the department					
I attend OUT study group discussions within the school					

11. As a student of the Open University of Tanzania, how well are you supported at your school? *Please use a tick* **(**√**)**.

	Well supported 1	**Adequately supported 2**	**Poorly supported 3**
By school			
By OUT			

12. This study is planned to move further into Phase Two. The second phase may require some in-depth interviews and observations at your school. We would appreciate if you would be willing to participate in both phases. If you are willing to take part in Phase Two, please enter information in the provided space below:

Name	
Email address	
Phone	
Name of School	
Name of Department	
Name of the Region	

Once again **THANK YOU** for taking part in this study. Your participation is highly appreciated.

Appendix 3: Topics for interview with LTP coordinator at MoEVT

- The place of the licensed Teachers (LTs) in the SEDP
- Recruitment and placement of LTs
- Remuneration package for the LTs
- Induction of the LTs
- In-service training for the LTs: the role of experienced teachers in schools, mentors, seminars
- The role of educational officers at the local government level in managing the LTs
- Attrition rates for teachers in general and LTs in particular
- From the Ministry's point of view, what is the state of the Licensed Teacher Programme (LTP) at the Open University of Tanzania – design of the programme, costs, availability of study materials, student progress and prospects for graduating in three years.
- The future of LTs and LTPs
- Lessons learnt from the use of LTs in teaching
- Lessons learnt from the use of LTP in collaboration with the OUT

Appendix 4: Topics for interview with school heads

- Head's job experience in school management
- Working conditions of teachers, particularly the LTs
- Availability of support services for the LTs both professional and relational, at school level
- Prospects in having a formalised mentorship for new teachers in schools – implications on school requirements and costs
- The impact of OUT studies on teaching for the LTs

Appendix 5: Topics for interview with the LTP student teachers

- Experience during the first year of teaching: placement, workload, living condition, management support, peer support, departmental support, and public support
- Progress in the OUT studies: availability of study materials, effectiveness of the face-to-face tutorials, communication with the OUT tutors, assignments, tests and exam results for the first year
- The state of student support by school, OUT and the Ministry: what is working, and what needs to be done?
- Prospects of completing studies in three years

Appendix 6: SMS/Email/Telephone interview topics for LTP student drop-outs

- Reasons for the drop-out
- What could be done to for the student teacher to persist in LTP?
- Comparison between teaching and the current job/activity

Appendix 7: A guide for document identification

	Information sought	**Document**	**Location**
1	Teacher demand and recruitment strategy	SEDP Budget speeches	MoEVT
2	Recruitment and training of the LTs	LTs files	MoEVT
3	LTP: Programme design and plans	MOU –OUT and MoEVT	
4	Induction programme for LTs and for the LTP student teachers	Induction modules Induction speeches and lectures	MoEVT OUT
5	LTs placement and attrition	Education statistics on LTs	MoEVT
6	Mentorship in schools	LT and LTP reports	MoEVT
7	Student progress	Progress reports	OUT

Appendix 9: Teaching practice assessment form

THE OPEN UNIVERSITY OF TANZANIA

FACULTY OF EDUCATION

ASSESSMENT OF PERFORMANCE OF STUDENT TEACHERS IN TEACHING PRACTICE

(For third and fifth year students)

Student Teacher:..... Reg.No.....Year of study .....

Subject ..... Class ..... Date ..... Time .....

Institution/School. ..... Region ..... Supervisor .....

Performance of student teacher. A (Excellent) = 7-10; B+ (Very Good) = 6; B (Good) 5; C (Satisfactory/Pass) = 4; D (Poor) = 3; and E (Very Poor) = 0-2. Circle the right numeral in duplicate.

		E	**D**	**C**	**B**	**B+**	**A**
	I. LESSON PREPARATION						
1.	Ability in setting up objectives clearly and appropriately;	0,1,2	3	4	5	6	7,8,9,10
2.	Ability in selecting materials, relevant examples and resource materials appropriate to the level of the class	0,1,2	3	4	5	6	7,8,9,10
3.	Ability in selecting appropriate Teaching aids:	0,1,2	3	4	5	6	7,8,9,10
4.	Ability to relate the lesson plan to Overall objectives and structure of the scheme of work and the syllabus:	0,1,2	3	4	5	6	7,8,9,10
	II PERFORMANCE:						
5	Ability to arouse and sustain interest during the lesson	0,1,2	3	4	5	6	7,8,9,10
6	Ability to relate one part of the lesson to the others	0,1,2	3	4	5	6	7,8,9,10
7	Ability to use the chalk board and other teaching aids	0,1,2	3	4	5	6	7,8,9,10
8	Ability to promote full participation of all the students through group work or other procedures	0,1,2	3	4	5	6	7,8,9,10
9	Ability to arouse and handle students' questions	0,1,2	3	4	5	6	7,8,9,10
10.	Attitude towards students (e.g. courteous) helpful etc.)	0,1,2	3	4	5	6	7,8,9,10
11.	Speaking and communication skills (competence Loudness, clarity, lucidity, articulation, appropriateness, etc.)	0,1,2	3	4	5	6	7,8,9,10
12.	Ability to use both recall and thought provoking questions	0,1,2	3	4	5	6	7,8,9,10
13.	Ability to engage students in critical thinking and problem solving	0,1,2	3	4	5	6	7,8,9,10
14	Demonstrated mastery of subject matter	0,1,2	3	4	5	6	7,8,9,10
15	Ability to follow up the objectives of the lesson	0,1,2	3	4	5	6	7,8,9,10
16	Ability to devise and use an adequate variety of procedures to evaluate progress in all of the objectives of the lesson:	0,1,2	3	4	5	6	7,8,9,10
	III **PERSONAL FACTORS**						
17	Observed factors, such as general appearance, confidence and mannerism	0,1,2	3	4	5	6	7,8,9,10
18	Observed class management, control and organization	0,1,2	3	4	5	6	7,8,9,10

ADDITIONAL COMMENTS

1. Ways in which the lesson could have been improved:

_____

2. Special factors which have affected the observed performance:

_____

V. AVERAGE SCORE: _____

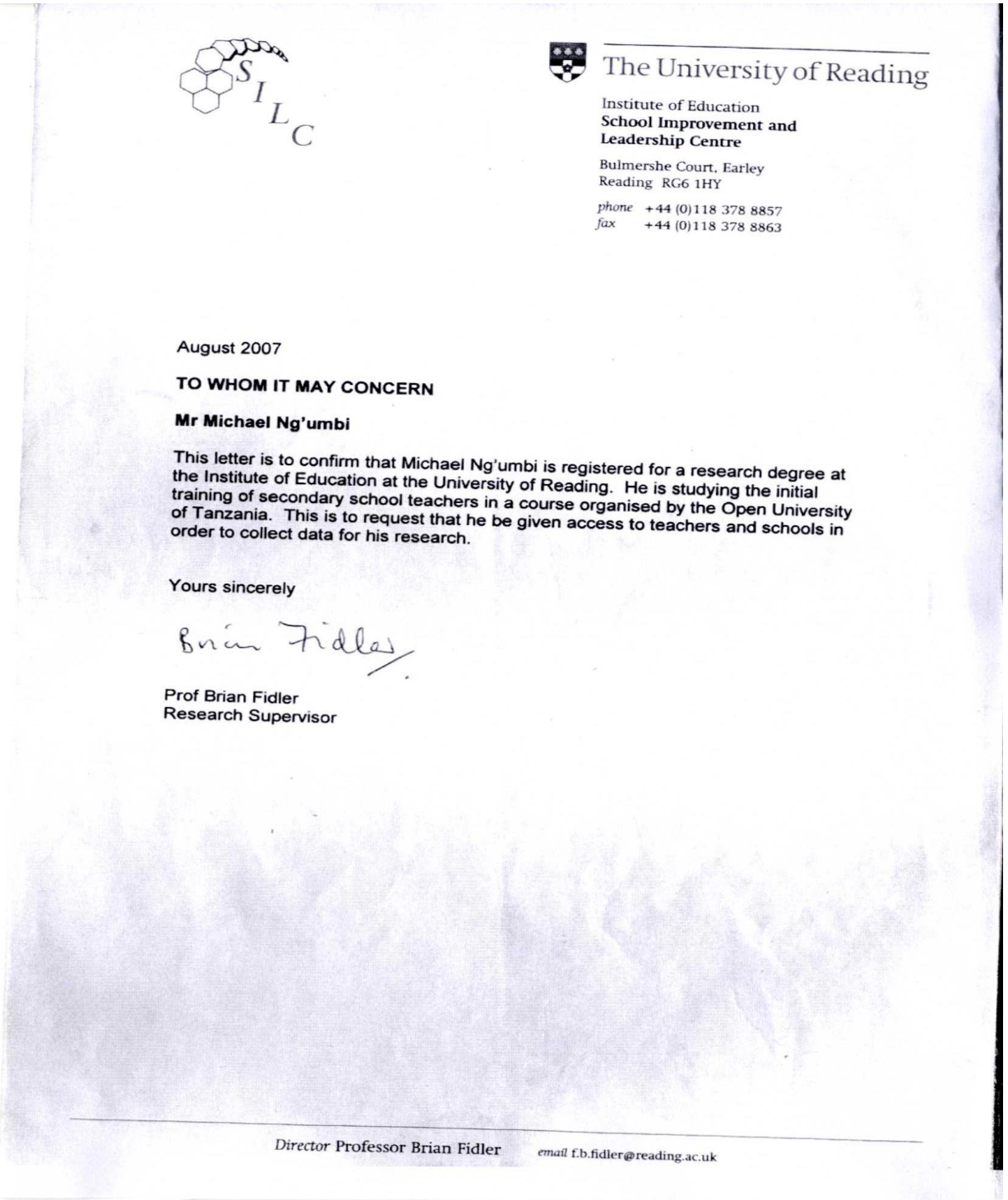
Supervisor _____

Signature: _____

Appendix 9: A map of the United Republic of Tanzania

Source: www.lib.utexas.edu/maps/tanzania.html [accessed on 1/2/2007]

Appendix 10: Letter of introduction by University of Reading, 2007



SILC

The University of Reading

Institute of Education
School Improvement and Leadership Centre
Bulmershe Court, Earley
Reading RG6 1HY
phone +44 (0)118 378 8857
fax +44 (0)118 378 8863

August 2007

TO WHOM IT MAY CONCERN

Mr Michael Ng'umbi

This letter is to confirm that Michael Ng'umbi is registered for a research degree at the Institute of Education at the University of Reading. He is studying the initial training of secondary school teachers in a course organised by the Open University of Tanzania. This is to request that he be given access to teachers and schools in order to collect data for his research.

Yours sincerely

Brian Fidler

Prof Brian Fidler
Research Supervisor

Director Professor Brian Fidler *email* f.b.fidler@reading.ac.uk

Appendix 11: Letter of introduction by University of Reading, 2008

University of Reading

Institute of Education
Bulmershe Court
Earley
Reading RG6 1HY

phone +44 (0)118 378 8632
fax +44 (0)118 378 8810
email f.b.fidler@reading.ac.uk

17 October 2008

TO WHOM IT MAY CONCERN

MR MICHAEL NG'UMBI

This is to request your co-operation in the research of Mr Michael Ng'umbi who is completing a Doctor of Philosophy research degree at the Institute of Education at the University of Reading, UK.

As part of his research into 'The impact of institutional support on student progress and completion in the Licensed Teachers Programme at the Open University of Tanzania', he wishes to interview Ministry officials who oversee the programme and visit schools where the licensed teachers are based. He also will consult records at the Open University.

Thank you in advance for your co-operation.

Yours sincerely,

Brian Fidler

Professor Brian Fidler
Supervisor

THE UNIVERSITY OF READING

Appendix 12: Letter of introduction by MoEVT, 2007

UNITED REPUBLIC OF TANZANIA

MINISTRY OF EDUCATION AND CULTURE

Cable: "ELIMU" DAR ES SALAAM
Telex: 41742 Elimu Tz.
Telephone: 2121287, 2110146
Fax: 2127763

POST OFFICE BOX 9121
DAR ES SALAAM

In reply please quote:

Ref. ED/EP/ERC/VOL1/10 Date: September19th, 2007

TO: Regional Administrative Secretary--IRINGA

Att. REO--Iringa
Dear Sir/Madam,

Re: Research Clearance for Michael Wilfred Ng'umbi:

The above-mentioned student of the **Institute of Education,University of Reading-UK.** is conducting a study in Iringa region.

The topic for the research is, **"School Based Support and Student Completion in Teacher Education by Distance Learning."**

To be able to complete his studies, he will need to collect data and necessary information from the sampled institutions within your region. In line with the above information you are being requested to provide ***the above researcher with*** needed assistance that will enable him to complete his research study successfully.

The period by which this permission has been granted is from **21st Sept - to 31st Dec, 2007.**

By copy of this letter, Mr. M. W. Ng'umbi is required to submit a copy of the report (or part of) to *the Permanent Secretary, Ministry of Education and Culture* for documentation and reference.

Yours truly,

Dr. Emmanuel M. Nkumbi
For Permanent Secretary

CC.Mr.M.W. Ng'umbi

Appendix 13: Letter of introduction by MoEVT, 2008

THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF EDUCATION AND VOCATIONAL TRAINING

Cable: "ELIMU" DAR ES SALAAM
Telex: 41742 Elimu Tz.
Telephone: 2121287, 2110146
Fax: 2127763

Post Office Box 9121
DAR ES SALAAM

In reply please quote:

Ref. ED/EP/ERC/VOLII/ 24

Date: Monday, November 10, 2008

The Regional Administrative Secretary- Iringa,

ATT. Regional Education Officer:

RE: RESEARCH CLEARANCE FOR MR. MICHAEL WILFRED NG'UMBI:

The captioned matter above refers. The mentioned is bonafide student of University of Reading who is conducting research on the topic titled **"The Impact of Institutional Support on Student Progress and Completion in the Licensed Teachers Programme at the Open University of Tanzania "** as part of his Doctoral dissertation in PhD (Educational Management) programme.

The researcher needs to collect data and necessary information from your office(s). He will also need to visit licensed teachers in sampled secondary schools at Iringa Region.

In line with the above information you are being requested to provide the needed assistance that will enable him to complete this study successfully.

The period by which this permission has been granted is from **10th to 30th November, 2008.**

By copy of this letter, **Mr. Michael Wilfred Ng'umbi** is required to submit a copy of the report (or part of it) to *the Permanent Secretary, Ministry of Education and Vocational Training* for documentation and reference.

Yours truly,

Abdallah S. Ngodu
For Permanent Secretary

CC: Mr. Michael Wilfred Ng'umbi

Appendix 14: Research permission by OUT, 2008

THE OPEN UNIVERSITY OF TANZANIA

Office of the Deputy Vice Chancellor (Academic)

P.O. Box 23409
Dar es Salaam, Tanzania
http://www.out.ac.tz

Tel: 255-22-2668820/ 2668992ext.104
Fax: 255-22-2668820/ 2668759
E-mail: dvc-ac@out.ac.tz

OUT/PF/335/31

13th November, 2008

Mr. Michael Wilfred Ngumbi,
Open University of Tanzania,
P.O. Box 23409,
DAR ES SALAAM.

Dear Sir,

RE: RESEARCH ON THE LICENSED TEACHER PROGRAMME IN TANZANIA

Refer to your letter of 6/11/2008 requesting to access data on the management of Licensed Teachers Programme, being run jointly by Open University of Tanzania and Ministry of Education and Vocation Training.

You are permitted to access the said data, however I may comment on the suitability of this case study for Ph.D. Research. This is just an initiative aimed to see if it is feasible to make mass production of teachers. So far the Ministry of Education and Vocation Training has not released a second batch for enrolment.

Regards,

Prof. D.T.K. Shemwetta
Deputy Vice Chancellor (Academic)

Cc: VC
DVC (RM)